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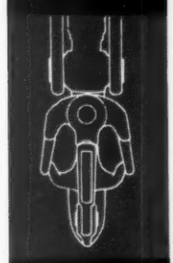
Locking-arms open, ready for inserting the elevator links.



A heavy, overhanging metal section prevents links from "jumping" the hook.

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Separate hooks for the swivel bail, and each elevator link, eliminate off-center strains.

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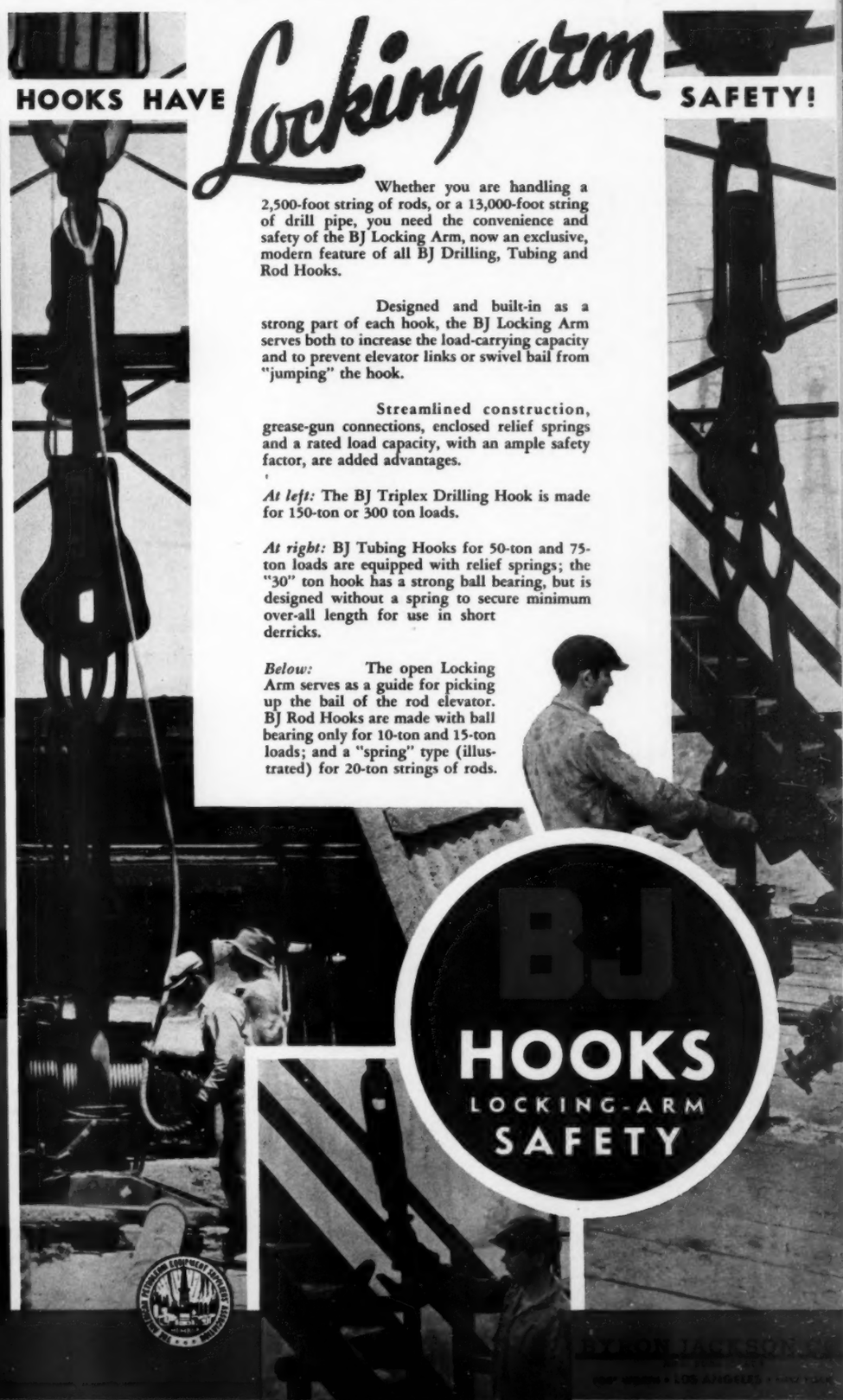
At left: The BJ Triplex Drilling Hook is made for 150-ton or 300 ton loads.

At right: BJ Tubing Hooks for 50-ton and 75-ton loads are equipped with relief springs; the "30" ton hook has a strong ball bearing, but is designed without a spring to secure minimum over-all length for use in short derricks.

Below: The open Locking Arm serves as a guide for picking up the bail of the rod elevator. BJ Rod Hooks are made with ball bearing only for 10-ton and 15-ton loads; and a "spring" type (illustrated) for 20-ton strings of rods.



BJ HOOKS LOCKING-ARM SAFETY

EXTRON JACKSON

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July 11, 1935 Volume 34, No. 8

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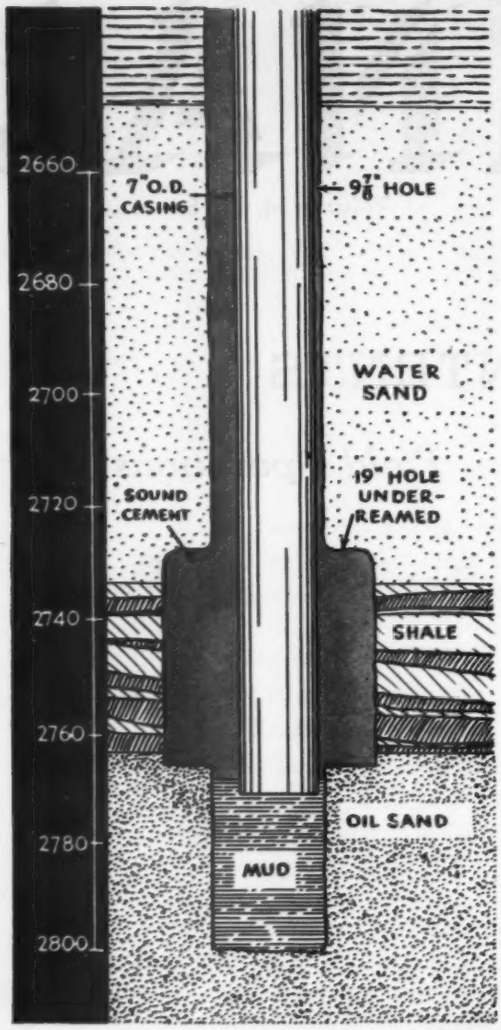
IS WATER EXCLUSION

A *problem* IN YOUR WELLS?



Modern methods have at last made it possible to successfully and permanently seal-off water strata located either above or below the oil sand. Even when the water sand is prolific and is separated from the producing zone by a narrow body of shale, results have been entirely satisfactory.

Here Is the "ENGINEERED" ANSWER!

UNDER-REAMING METHOD

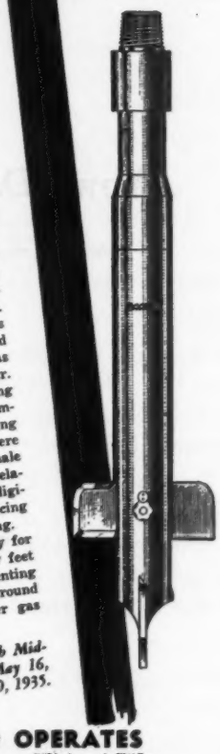
The second method of excluding water from producing wells is concerned primarily with the completion of wells through a prolific water sand occurring above the oil sand and separated from it only by a few feet (10 ft. to 20 ft.) of shale. Such a condition gives only a few feet between these two sands in which to seal off the upper water. Ordinary methods of casing cementing have been found to be unsatisfactory in shutting off this water due to the fact that the casing hangs to one side of the hole, thus preventing the cement from completely surrounding the pipe in these few feet.

In order to get a good cement seal at the casing shoe, it is necessary that the cement completely surround the casing. This requires that the casing hang free and be nearly concentric with the hole. To accomplish this, the hole is under-reamed to a larger size from a point 25 ft. or more above the casing seat down to the casing seat. The size of the under-reamed hole is usually sufficient to give at least 3 in. clearance between the casing and the wall. The casing is then run and cemented in the regular manner. Fig. 3 illustrates a typical casing-cementing job using this method to shut off upper water.

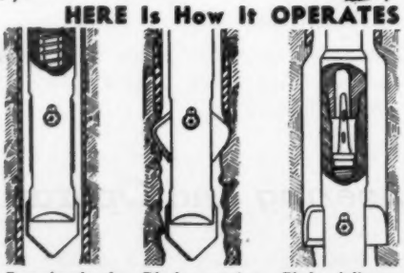
This method of cementing the oil-string casing has been used in a number of wells in a field that is troubled with this particular type of water condition, and has proved very effective in sealing off this upper water. The only additional cost of this method of cementing over the regular method is the rent of the under-reaming tool, and the rig rent for the time required in making one round-trip and under-reaming. Ordinarily, where not more than 25 ft. are under-reamed in the shale formation, only one set of blades is necessary. The relatively small cost of under-reaming is considered negligible compared with the added protection of the producing horizon obtained by this method of casing cementing.

While this method has been developed primarily for the exclusion of water occurring only a very few feet above an oil sand, it might be utilized for cementing all oil strings in order to obtain a better seal around the casing shoe—and possibly to exclude upper gas where the production of same is undesirable.

(Note): Extract from paper read before Fifth Mid-Year Meeting, A. P. I., Tulsa, Oklahoma, May 16, 1935. For full text see Oil Weekly of May 20, 1935.



HERE Is How It OPERATES



Running-in the hole with blades inside of body. *Blades cutting into formation as rotation starts.* *Blades fully expanded in cutting position.*

IT HAS UNEQUALED EXPANSION

Any Baker Wall Scraper can be equipped with blades to "wall scrape" to twice or more the O. D. of the body of the tool. For example, the No. 6 size runs-in through 9⅝" casing and has a reaming capacity from 9¼" to 19".

IT HAS PLENTY OF CLEARANCE

The largest O. D. of the body of any Baker Wall Scraper leaves plenty of room for "washing-over" if a weak drilling string should twist off. The extreme body O. D. of the No. 6 size is only 7¾".

IT COMES SAFELY OUT OF THE HOLE

In many thousands of runs we have no record of failure chargeable to the Baker Wall Scraper. The blades close downward into the body, and will shear through or dislodge metal or other debris when the tops of the blades contact the casing shoe while coming out of the hole.

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BAKER ROTARY WALL SCRAPER

California and Texas Problems Need Correction But Situation Still Good

BY ANDREW M. ROWLEY

WHILE ATTENTION of the petroleum industry is directed now at the excess crude oil production in California and sales by the State of Texas of large quantities of confiscated crude oil at prices far below posted quotations of purchasing companies, other factors of more general importance should not be forgotten in considering the present situation. Crude oil production in the United States this year has been and is being maintained consistently at a higher level than last year and yet crude oil stocks on June 1 were 17,000,000 barrels less than on June 1, 1934. Stocks of all oils were 19,000,000 barrels less. New high records being established by consumption account for the absorption of the greater production and the withdrawals from storage.

These facts, however, would be poor consolation to operators in California if crude oil prices there were reduced rather drastically, as is entirely possible unless the practice of a small percentage of producers of selling crude under posted prices is stopped and unless these operators also join with the other 95 per cent in adhering to a curtailment program. Conditions in East Texas have all the elements which might cause considerable trouble unless corrective measures are applied. Legitimate operators cannot understand the policy by which the State sells large quantities of crude oil at such low prices and then issues tenders on this oil which it had declared to be illegally produced. Such sales might very easily affect the whole posted price structure in that area.

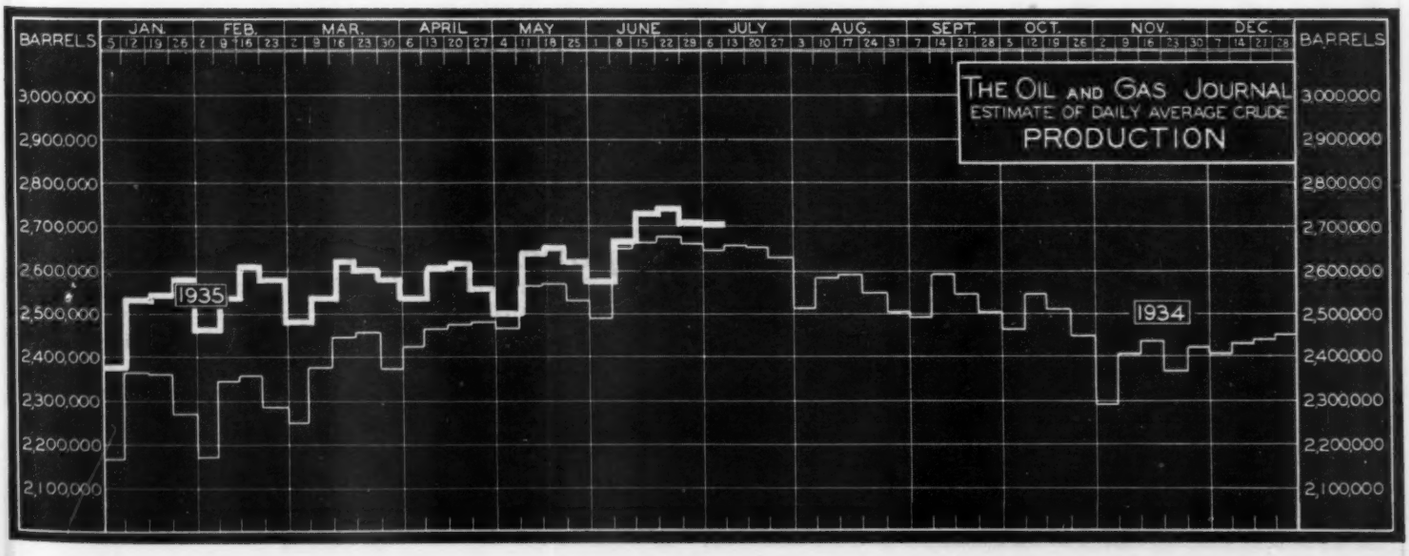
Field operations reflect the increasing demand for oil and are being maintained at a high level. In Kansas there were 300 active operations this week while one operator in the Fitts Pool in Oklahoma completed six large wells in two days. North Louisiana, where developments have been somewhat colorless, broke into the limelight with an oil well in the Rodessa Pool which flowed an estimated 5,000 to 10,000 barrels daily. This pool has been producing natural gas heretofore, the new well being the deepest producer in that section of the state. The best completion in the Crystal Township area of Michigan since the bringing in of the discovery well last March has stimulated waning interest in that section. The new well started flowing at the rate of 300 barrels daily and then made between 125 and 150 barrels an hour.

Production 2,708,462, Decrease 5,713

Estimated daily average production for the week ending July 6, a comparison with previous week and one year ago follows:

	July 6	June 29	July 7, 1934
Oklahoma—			
Oklahoma City	137,075	157,225	178,500
Seminole-St. Louis	98,800	101,175	89,380
Remainder of State	255,700	262,775	232,465
Total Oklahoma	491,575	521,175	500,435
East Texas—			
Lathrop	170,316	168,526	242,960
Kilgore	164,328	163,297	176,590
Joiner	163,928	159,594	157,560
Total East Texas	598,572	491,417	577,110
West Texas	156,415	153,884	134,792
North Central Texas	84,723	84,779	91,414
Texas Panhandle	60,453	58,677	63,155
East Central Texas	49,895	49,934	54,744
Gulf Coast—Texas	188,254	186,197	170,955
Southwest Texas	60,710	64,429	48,157
Total State of Texas	1,099,022	1,089,317	1,140,327
Kansas	145,200	147,500	130,545
North Louisiana	22,575	22,635	25,020
Gulf Coast—Louisiana	116,750	118,550	72,355
Total Louisiana	139,325	141,185	97,375
Arkansas	30,740	30,955	31,880
Eastern Fields (except Michigan)	106,000	104,000	104,500
Michigan	42,830	42,963	31,677
Rocky Mountain area	108,270	105,580	96,250
California—			
Santa Fe Springs	37,900	36,500	42,750
Long Beach	73,250	72,500	69,000
Mountain View	21,500	20,500	7,900
Elwood	13,750	13,800	10,850
Kettleman Hills	59,000	62,750	54,500
Remainder of State	340,100	325,450	327,000
Total California	545,500	531,500	512,000
Total United States	2,708,462	2,714,175	2,644,989

Decrease 5,713 Bbls. Daily



The Bulletin Board

Gasoline Consumption in the United States continues to establish new all time high records, the gain during the first five months of this year being 3.7 per cent over the similar period of last year.

▪

Refinable Crude stocks decreased 1,200,000 barrels during May while withdrawals of gasoline from storage were greater than had been expected, stocks of motor fuel on May 31 being 2,641,000 barrels less than on April 30 and 455,000 barrels less than on May 31, 1934.

▪

Oil Legislation is not as yet on the must list for Congress and sentiment there appears to be that provisions of the Thomas Bill, besides being unconstitutional, are not necessary to the welfare of the petroleum industry.

▪

The Sales Tax of 2 per cent in New York City on the gross retail price of gasoline, which includes a 4 cent state and a 1 cent Federal tax, was attacked in a suit filed by 12 major marketing companies on the ground it is a tax on a tax which conflicts with a state law.

▪

East Texas Refineries operating on untendered crude oil will be shut down if the Texas Railroad Commission can get injunctions granted, the Commission having ordered a special drive against such refineries, with instructions to seek injunctions which would prohibit the buying, selling and refining of illegal crude.

▪

Hot Oil Production in East Texas is estimated at 35,000 barrels daily while runs to refineries in that area last week increased 11,000 barrels daily to 68,750 barrels daily. Sales of confiscated crude oil, by the state, at prices around 30 cents a barrel are causing grave concern.

▪

Runs to Stills in the Mid-Continent area during July are estimated at 10,000 barrels more than during June with demands for gasoline regarded as of a sufficiently high level to justify such an increase.

▪

Pipe Line Stations where about 15,000 barrels daily is handled may be constructed in the future along lines developed by the Stanolind Pipe Line Co. in its station in the Fitts Pool in Oklahoma where 16,000 barrels daily is being handled without tankage and without buildings for the engines and the pumps.

▪

The Cole Committee has held a meeting and started to draft its recommendations on oil legislation, sentiment of the committee apparently being against the Thomas Bill as introduced in the Senate.

Improved Color and cast of the finished motor oil is obtained when residuum or fuel oil bottoms made from Mirando crude is blended in small percentages with Gulf Coast lubricating oil distillates.

▪

Geophysical exploration for salt domes in the Gulf of Mexico off the coasts of Texas and Louisiana is expected to be launched in the near future by several major oil companies who believe such operations can be carried on as far as three miles from shore.

▪

Gasoline Volatility and its relation to car performance was the subject of exhaustive tests made on a stock car under actual operating conditions when it was found the corresponding lower intake manifold temperatures at which the more volatile fuels could be used added materially to the power and "pep" of the motor under test.

▪

Butane For Drilling engines is giving satisfaction on a wildcat test in which this gas is used as fuel in two 300 H.P. engines, the fuel being transported to the well in tank trucks. The butane being used is a by-product of a casinghead gasoline plant and probably would be wasted were it not for this use found for it.

▪

A Tentative Code of marketing practices has been formulated but it is expected additional changes will be made in the draft to conform to provisions of the anti-trust laws before the document is submitted to the board of directors of the A. P. I. for approval.

▪

Refinery Markets strengthened in all manufacturing centers except California where price cutting in the retail division and the threatened over supply of crude has weakened the entire Pacific Coast oil price structure.

▪

Production departments of the Shell Petroleum Co. in the Mid-Continent and Gulf Coast areas will take over the operation of the company's natural gasoline plants on July 15 and a natural gasoline technical department will be established in the executive offices at St. Louis.

▪

Expansion Work at the Richmond refinery of the Standard Oil Co. of California, involving an expenditure of $2,500,000, is practically completed, the work including new cracking facilities, a new solvent refining unit and additional loading wharves.

▪

Possibilities are good for further oil and natural gas fields in Michigan although operators must have plenty of nerve, financial backing and optimism as many dry holes are drilled around producing wells.

Wotta Life!

A major oil company received a check from the Federal Government for not raising cotton on its property.

—Drawn Exclusively for The Oil and Gas Journal.

New Attempts to Obtain Compromise On Federal Oil Legislation

By HUGH D. MALLON

WASHINGTON, D. C., July 8.—With this session of Congress extended indefinitely due to the desire of President Roosevelt to enact legislation covering increased taxes in the higher brackets, inheritance taxes and increased gift levies, no accurate forecast can be made on the future of oil legislation.

Such legislation seems to have had the sting taken out of it, due to the defeats which the administration has suffered in the courts and in Congress. Abolition of the "death sentence" provision in the holding company bill has caused the President to become careful of controversial measures to be recommended by him. Oil legislation comes within the controversial field, and observers are of opinion the President will not recommend any oil legislation unless the proposed law is substantially agreed to by Congressional representatives of practically all oil producing states.

The Cole petroleum subcommittee met today and started preliminary discussions designed to formulate oil legislation for presentation to Congress. No definite conclusions were reached, but other meetings of the committee in the next few days are expected to bring forth positive recommendations.

Representative Disney of Oklahoma has intimated he might be ready to bargain to secure passage of oil legislation sponsored by him. He has inferred the farthest he will go in compromising will be to propose a law which will include ratification of the interstate compact, appointment of a Federal fact-finding agency to make recommendatory allocations of crude oil production to the states, and limitation of imports. Mr. Disney is considering inclusion of provision making permanent the Connally law limiting interstate shipments in excess of state allowables.

Quotas in commerce, as proposed in the Thomas bill, pending in the Senate, are unconstiutional in the opinion of Representative Disney, in the light of the decision of the Schechter case, but he believes a constitutional method of dealing with overproduction in states which have no regulatory body could be worked out without any invasion of the rights of the state. This provision will be limited strictly to states having no regulatory bodies, Mr. Disney believing if this is done the support of Texas, Oklahoma and Kansas which have regulatory state agencies will be thrown behind the bill.

Rayburn and Cole Oppose

Representative Sam Rayburn, of Texas, a staunch opponent of any attempt to bring the oil industry under the domination of the Federal government, has however, indicated he will not accede to the legislation which Representative Disney is sponsoring. As Representative Rayburn is chairman of the House Interstate and Foreign Commerce Committee, to which oil legislation will probably be referred, his opposition may block any attempt to enact such laws.

Representative William P. Cole, of Maryland, chairman of the special subcommittee of the Interstate and Foreign Commerce Committee, which carried on intensive investigations of the oil industry last year, is also opposed to the Thomas bill, it being his view, and the view of the committee the provisions contained in that bill besides being unconstitutional are not necessary for the welfare of the industry.

Representative Cole has not conferred with Mr. Disney and has no intention of compromising his position either with respect to Federal oil legislation or with the oil producing states.

Code and Contracts

Attempts of the Administration to enforce code compliance provisions upon all bidders for Government contracts have met with failure, according to a recent ruling of Comptroller General J. R. McCarl who has held there is no authority for government departments to demand any specific standards of labor or fair trade practices.

Mr. McCarl ruled such provisions would be "an unauthorized use of appropriations and an unjustified drain upon the public treasury to award contracts submitted on the basis of compliance with a code when the contractor would not be required to so comply," when by so doing the contractor would receive such additional compensation as might on the basis of code compliance have been included in the bid.

A reservation made by the Procurement Division of the Treasury Department provides that "Bids are requested on the basis that if subsequent legislation shall require observance of minimum wages and/or maximum hours of employment and/or limitation as to age of employes, in the performance of Government contracts any contract entered into shall be subject to modification to accord with such statutory requirements to the extent authorized or required by law." The Comptroller General has this to say on the subject of such a reservation:

"In view of the requirements of Section 3709, Revised Statutes, there appears no authority of law for requiring bidders and prospective contractors of the United States to agree to such provision as a condition precedent to contracting with the United States. *** The said provision when included in the advertised specifications may properly be viewed under section 3709, Revised Statutes, only as a request to bidders on the part of the advertising and contracting agencies of the United States that bids be submitted upon the basis that in event there should be enacted legislation of the character mentioned prior to the completion of the contract to be awarded the contractor will agree to modifiaction of the contract to conform with the terms of the requirements of such law."

In other words, if the bidder refuses to include in the contract, or in the bid, the agreement to future modification of the contract because of subsequent changes in the law, this does not call for throwing out of such bids, or readvertising. The low bid must be accepted, according to the law.

Proposed Legislation

The subsequent legislation which is the cause of the controversy between the procurement division and the Comptroller General is embodied in a bill introduced by Senator Walsh of Massachusetts, intended to provide conditions for the purchase of supplies and the making of contracts, loans, or grants by the United States. The bill provides there shall be included in all proposals, or contracts, entered into with the Federal government, provision that all persons in classes of employments described specifically, or by reference in the bid, while engaged in the production of the supplies, or in the carrying out of the contract have been and will be paid not less than such minimum wage and employed not more than the maximum hours as shall be designated in the invitation to bid.

It would be further provided that no person under the age of 16 would be employed in the production. There is no provision calling for the acknowledgment of any labor organization, or any provision on collective bargaining, it being the opinion of the sponsors that such could be taken care of under the Wagner Labor Disputes bill.

The terms of this bill will apply not only to those doing business directly with the Federal government, but also with those supplying contractors, or purchasers of supplies, who may indirectly be connected with the Federal government, such as Public Works projects where the work may be going on by both a loan and grant, or even by a loan. In the case of contracts entered into in pursuance of a loan and grant the hours and wage provisions, as well as minimum age of employes, shall be stipulated in the loan and grant agreement or in the loan agreement.

A bill to provide for the inspection and regulation of vessels engaged in the transportation of inflammable, explosive, and like dangerous cargoes in the navigable waters of the United States has been reported to the House by the Merchant Marine Committee. It was introduced by Representative Bland.

The bill provides that "no vessel, regardless of size, or rig, excepting public vessels of the United States, shall transport on the navigable waters of the United States any inflammable explosive, or like dangerous cargo, until such vessel has been inspected by the Board of local inspectors to determine that such cargo may be carried on such vessel with safety, and a permit issued to her for the presence on board of such cargo."

Assumes New Duties

—Photo by Rivkin.

S. S. SMITH

S. S. Smith, general superintendent of the Shell Petroleum Corp.'s natural gasoline plants in the Mid-Continent, will move to St. Louis July 15 to assume new duties in the executive offices of the company under R. B. High, general manager of manufacturing.

R. E. Baker, chief chemist, will be placed in charge of the technical problems arising in the plants but effective July 15 the operation of these units will be placed in the hands of the production superintendents in the respective areas. The Shell operates plants in North Texas, Texas Gulf Coast, Kansas, Oklahoma, New Mexico and in the Panhandle, having a total daily natural gasoline production capacity of 113,000 gallons.

In his new work Mr. Smith will follow the technical problems of the natural gasoline division but will apply these to refinery and general manufacturing, particularly new processes as these approach the field of utilizing the fractions or hydrocarbons usually identified with natural gasoline production.

California Standard Nears Completion of Refinery Construction Program

By L. P. STOCKMAN

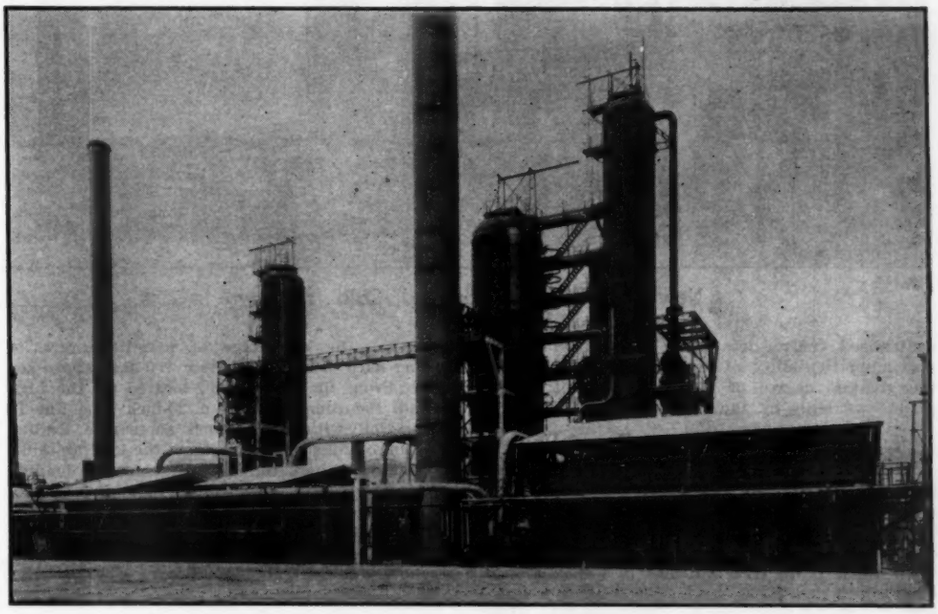
The Standard Oil Co. of California has practically completed a construction program at its Richmond, Calif., refinery involving an expenditure in excess of $2,250,000. The expenditure permitted the construction of a combination atmospheric and vacuum crude oil unit, solvent treating and recovery plant, lubricating oil vacuum rerun unit, increased pipe line and wharfage facilities, tanks and a booster plant at the end of the Richmond wharf. The installation of this additional equipment is but one phase of the Standard's general expansion program now nearing completion and is closely tied in with the revision made in the company's pipe line facilities in the San Joaquin Basin and additions made to marine loading facilities at the El Segundo refinery in southern California.

The Standard Oil Co. of California, the largest producer, marketer and refiner on the Pacific Coast, is rapidly coming into prominence in the world's markets and at the present rate of development will become a factor of considerable importance in both eastern and western hemispheres. The growth and expansion of this company under the direction of President K. R. Kingsbury and other executives has been little short of phenomenal during the past few years. The Standard's growth in California has been consistent but, unlike many other California concerns, this company did not limit its crude oil potentialities or markets to Pacific Coast territory. It stepped into Texas a few years ago and more recently became a factor of importance along with the Ohio Oil Co. in Wyoming by discovering substantial production on the Medicine Bow structure in Carbon County where these two companies finished a joint project flowing approximately 6,000 bbls. of crude oil and about 60,000,000 feet of natural gas per day.

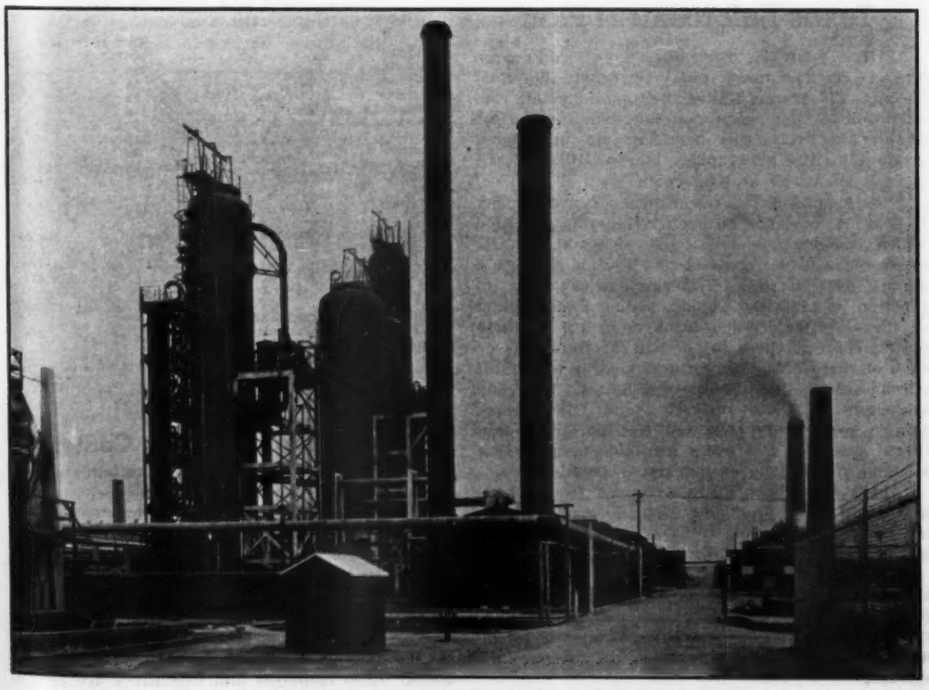
The progressiveness of this company is evident by its achievements on Bahrein Island in the Persian Gulf where it discovered and developed commercial crude oil production a few years ago. If subsequent exploration and exploitation work proves successful at Saudi, Arabia, where the company has a concession aggregating 165,000 square miles, the company will become a factor of considerable importance in the world's markets.

Within the past year, the company constructed another pipe line from Kern County to tidewater at Estero in Monterey County and this installation permits greater flexibility and cheaper transportation rates to its various refineries. The Standard has three pipe lines terminating at this point. Two of these are crude oil or black oil lines and the third is a white line for the movement of natural gasoline.

The new combination atmospheric and vacuum crude unit at the Richmond refinery is a two-stage distillation unit having a charging capacity of 21,000 bbls. of crude per day. The crude oil is fed through appropriate heat exchangers and a tubular heater to a fractionating column which is 13 feet in diameter and 101 feet 6 inches in height. From appropriate points in the tower, well fractionated cuts may be withdrawn ranging from light gasoline to light lubricating oil distillates. From the bottom of the tower, a heavy residuum is withdrawn and this is fed through a second tubular heater to the vacuum column which is 19 feet 6 inches in diameter and 64 feet 2 inches in height. From this fractionating column a number of closely fractionated lubricating oil distillates can be withdrawn. From the bottom of the column residual oil ranging in penetration from 30 to 60 is discharged. To a large extent, the unit is equipped with electric prime movers and control is centralized. Automatic equipment has been generously provided in order to assure a close regulation of quality. This unit was constructed by the M. W. Kellogg Co.



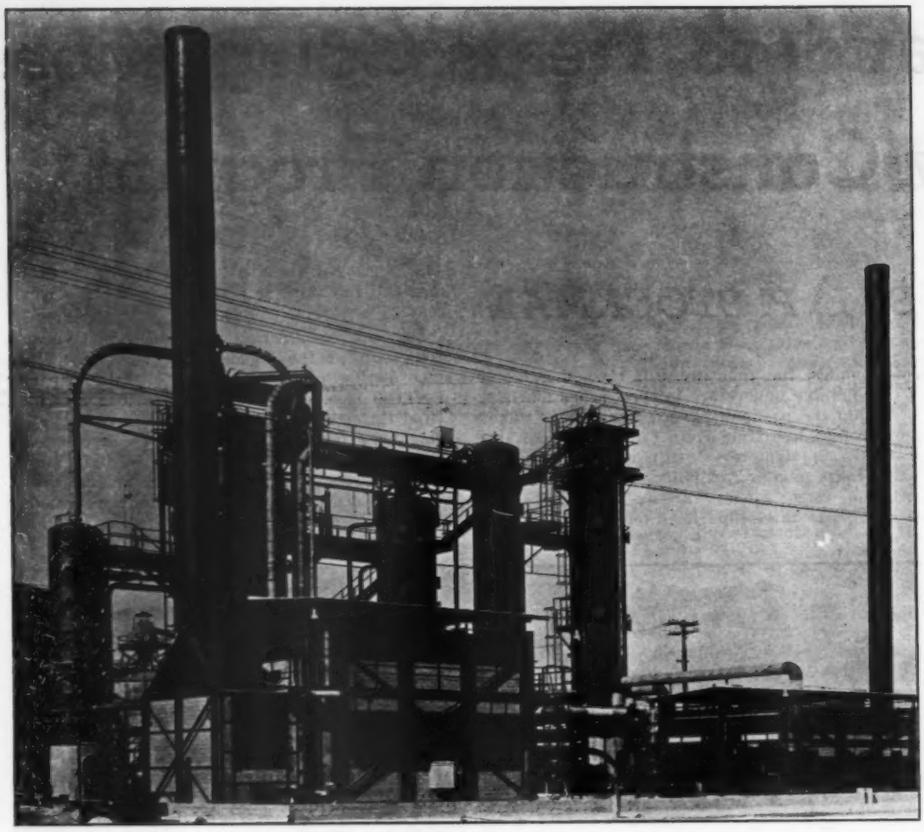
Combination atmospheric and vacuum crude rerun unit



Standard Oil Co. of California, Richmond refinery

Solvent Treating and Recovery Plant

The wide range of lubricating oil distillates produced in the combination atmospheric and vacuum crude unit is processed through a new solvent treating and recovery plant. The charging capacity of this new plant is 3,580 bbls. per day and phenol is used as the active solvent. The feed stock is contacted with the solvent, the raffinate and extract being withdrawn continuously for further processing. Both of these products pass separately through individual recovery systems where the phenol is removed and returned for further use. The separate systems consist essentially of heat exchangers, vacuum and atmospheric towers, tubular heating furnaces, condensers, coolers, and other necessary equipment. As in the case of the combination unit, electric motors are largely used as prime movers and a considerable amount of automatic equipment with



New phenol plant, Richmond, Calif., refinery

centralized control has been provided to permit maximum flexibility of operation and to provide the greatest degree of safety. This unit of the plant was built by the Fluor Corp.

Lubricating Oil Vacuum Rerun Unit

The lubricating oil vacuum rerun unit was constructed for the final fractionating of the lub distillates after their treatment in the solvent plant. The oil is fed through appropriate exchangers to a tubular heater, thence to a fractionating column which is 13 feet 6 inches in diameter and 64 feet 2 inches high. From this column, a number of finished cuts may be simultaneously withdrawn. This unit was constructed by the M. W. Kellogg Co. and the rated charging capacity of the unit is 3,450 bbls. per day.

In connection with the new San Joaquin Valley-Estero pipe line which the company completed recently, it became necessary to enlarge the crude oil and fuel oil handling facilities at the Richmond refinery. In order to increase flexibility, facilitate the movement of oil and to expedite the movement of ships, the company erected a 650-foot extension to the Richmond wharf. This increased wharfage permits more tankers to dock and gives the company the advantage of being able to both load and discharge cargoes simultaneously.

New Pipe Line

A new 20-inch pipe line was accordingly laid from the Richmond refinery to the company's San Pablo tank farm located 7 miles inland from tidewater. A booster pumping plant was also erected at the shore end of the Richmond wharf to expedite the unloading of ships. Additional tankage was also necessary and the usual number of pipe lines out along the wharf were also installed. In order to reduce the possibility of damage and interruption of service to a minimum, the company has installed modern fire protection equipment.

The Standard's first pipe line to tidewater at Estero was a 10-inch crude oil line from Kettleman Hills and was laid about five years ago. This was followed by an 8-inch gasoline line to permit the movement of natural gasoline from that field. The latest line is a 12-inch extending from Rio Bravo in Kern County to Estero a distance of about 108 miles. The Estero terminal of the Standard in addition to being strategically located has the advantage of permitting gravity loading as it is approximately 700 feet above sea level. From the tank farm, located on the high ground, the company uses a 20-inch pipe line in conjunction with the 16-inch submarine loading line and a 22-inch pipe line from the loading tanks to tidewater where the 18-inch submarine loading line is intercepted. Additional increased loading facilities have also been provided at El Segundo in southern California and at the present time the company is able to either discharge or receive gasoline, fuel oil, crude oil or other similar commodities.

Chairman Thompson Institutes Texas Enforcement Plan

FORT WORTH, Tex., July 8.—Chairman Ernest O. Thompson today directed the East Texas staff of the Railroad Commission oil conservation to "put every available man" on the job of stopping refineries operating on untendered crude oil. He telegraphed Harry Miles of the commission office at Kilgore:

"Please present to the attorney general today if possible, evidence on each refinery in the field which is operating on untendered crude, and request the attorney general ask for an injunction against each of these refineries and that this injunction prohibit the buying, selling and refining of illegal crude. When injunctions are obtained post a copy of these injunctions at the docks of each of these offending refineries so as to put all purchasers of this gasoline on notice. Post our inspectors at these refineries and file charges against every purchaser and transporter of this illegal gasoline. Put every available man on this job and get it done as quickly as possible."

About 6,000 bbls. daily were cut from schedules of 10 areas producing Mirando crude, reducing the daily allowable to 33,000 bbls. Purchasers had filed nominations for 28,554 bbls. daily.

Chairman Thompson said the commission found the market demand was insufficient to use current production during summer months. Reductions were ordered because "the commission is not willing to allow this oil to waste in aboveground storage."

The Eighth Court of Civil Appeals at El Paso upheld the validity of conservation law in deciding six "hot oil" suits in favor of the State. The appeals court ruled that "statutes to prevent waste of natural resources is within the police power of the State."

A three-judge federal court at Houston upheld the Texas conservation law and the Railroad Commission's proration program.

The court denied temporary injunction, asked by a dozen East Texas refiners, who sought to restrain the commission from interfering with their operations or attempting to confiscate oil. Notice of appeal was given, and Judge Foster urged it be perfected quickly, to permit presentation to the Supreme Court in October.

McMurrey Refining Co., of Arp, purchased 455,278.62 bbls. of crude, refined and semirefined products at public auction from the State through A. D. Blackwell, secretary of the company, for $125,000, or less than 30 cents per barrel. Mr. Blackwell also purchased 109,060 bbls. of such oil from the State on July 3 for $75,000. L. R. Hepworth purchased 29,000 bbls. of his own confiscated crude for $4,200 according to reports.

Repossessing such oil and semirefined and refined products is not helping the market situation in the State. This week runs to 31 refineries jumped to 68,750 bbls. per day, over 11,000 bbls. per day increase over last week's daily average. With major purchasers buying the refined products and refiners able to purchase their own confiscated oil at public auction at less than one-third of the posted price for crude, and state tenders being given on such oil, a bad situation is sure to become worse as more refineries and operators observe the workings of the confiscations and the sale of such oil and by-products.

On July 5, some 64,639 bbls. of pit oil confiscated from E. C. Holt was sold to Dick Duncan for $12,873.80. Approximately 55,200 bbls. of fuel oil confiscated from Albert J. McDonald, and approximately 47,000 bbls. of fuel oil from J. M. Davenport, was to be sold at Longview, and at Tyler approximately 65,000 bbls. of fuel oil confiscated from A. R. Bourg. At Henderson 2,916 bbls. of fuel oil from one party and 64,000 bbls. confiscated from another party were to be sold at auction. Attorney General Holt stated provisions were made for the plowing under of pits in which the oil is stored.

The District Court at Austin has ordered 100,000 bbls. of fuel oil belonging to Harry Campbell confiscated. The oil is in a pit in Rusk County and the pit is to be destroyed.

Overproduction for the week was estimated around 35,000 bbls. per day. It is reported there are six refineries in the field that are now operating without tenders.

WEEKLY TANK CAR SHIPMENT REPORT

(Week ending 12:01 a.m., June 30, 1935)

	Cars	Gallons
Gasoline	625⅝	5,090,457
Fuel oil	252	2,395,026
Residuum	11	89,159
Distillate	99	800,735
Casinghead gasoline	205	1,739,977
Kerosene	50⅛	399,430
Gas oil	39	323,644
Naphtha	12	95,023
Topped crude	68	644,859
Butane	1	9,556
Total	1,363	11,587,861

Shipped under federal and state tenders:	No. cars
Interstate	598
Intrastate	160
Coastwise	391
	1,149
Shipped under state tenders only:	
Intrastate movement	214
Shipped under injunction:	
Intrastate movement	...
Total	1,363

Sinclair to Rockfeller Center

NEW YORK, July 8.—The Consolidated Oil Corp. has leased seven floors in the recently completed International Building and by September 1 will join the several oil companies which are now located in the Rockefeller Center of midtown New York. The long lease is said to involve the purchase by the Rockefeller interests of the 30-story office building at 45 Nassau Street in downtown New York which has housed the headquarters of the Sinclair companies for several years. Approximately 1,000 employes and executives are located at the New York headquarters.

Geologists Say Lots of Chances in Michigan Punchboard

By R. C. CONINE

MOUNT PLEASANT, Mich., July 8.—Geologists say there are lots of chances left on the Michigan oil and gas punchboard. Structure sleuths have found 20 possible oil fields among the convolutions hidden under a deep blanket of glacial drift. All that is needed is considerable financial backing, more nerve, and an optimism that will take the strain of drilling dusters all around producing wells. If you are a McClanahan, a Leonard or a a Caldwell, you will come out ahead of the game, as numerous others have.

Today there are 11 producing oil fields and 6 gas fields in Michigan. In a number of these there are possibilities commercial oil production will be found in deeper formations. The oil fields, in the order of their appearance, are: Saginaw, Muskegon, Mount Pleasant and East Extension, Leaton, Vernon, Porter and Yost, Hart, West Branch, Edmore, Beaverton and Crystal. The gas fields are: Vernon, Clare, Broomfield, Austin, Moncalm-Mecosta and Crystal. The oil-producing formations are the Berea, Traverse, Dundee and Monroe, while the gas comes from the Michigan Stray. The accompanying map of the southern peninsula shows not only the proven area, but indicates potential fields and distribution of wildcatting activity.

"Aside from any consideration of possibilities in strata beneath the Devonian rocks," says Dr. R. B. Newcombe, state geologist, "there are still vast undeveloped areas for Dundee or Monroe production in central Michigan. Studies of regional structural geology indicate there are at least eight more or less parallel lines of folding crossing the central part of the basin in a northwest-southeast direction. The anticlines and domes along one of these 'trends' have already resulted in the discovery and development of three major and four minor oil pools at depths varying from 3,400 feet to 3,700 feet. That the other 'trends' will be productive is indicated by the fact an old field (West Branch) has been developed on one of them, commercial oil discoveries have been made on two of them (Beaverton and Crystal), and shallow Michigan 'stray' gas has been found on four of them."

The Newest Field

The newest field, by no means fully tried and therefore of particular interest, is the Crystal in Montcalm County, where an oil practically free from sulphur, of comparatively high octane value gasoline, and of highly promising lubricating possibilities, has been found in the shallow or Traverse formation. More important is the fact deeper drilling north of Duck Lake has uncovered prolific production in the Dundee limestone. Crystal and Ferris Townships in Montcalm County and New Haven Township in Gratiot are involved in this play.

Eight tests have come in strongly or promise good results in the Crystal Pool. These are: McClanahan's Flint, rated at 2,225 bbls. daily on July 1, and running 27,469 bbls. to McClanahan's refinery, and 39,282 bbls. to Simrall's pipe line in June: Leonard's West, rated at 1,946 bbls. daily on July 1, and running 27,748 bbls. to Pure Oil Transportation Co. lines and 29,090 bbls. to Simrall in June; Leonard's Durbin, rated at 1,841 bbls. a day on July 1, and running 27,761 bbls. to Pure and 28,222 bbls. to Simrall in June. East Gulf's Barger is rated at 22 bbls. a day and delivered 607 bbls. to Pure in June; Burnstein's Keel, rated at 284 bbls. a day, delivered 2,840 bbls. to Simrall in June; Caldwell's Robbins, one of the latest, is rated at 330 bbls. a day and delivered 303 bbls. to Simrall in June. Daily's Tow A is rated at 690 bbls. a day and delivered 30,257 bbls. to Pure in June. Snowden Wight Heirs, rated at 630 bbls. a day, delivered 5,469 bbls. to Pure's system in June. The accompanying map shows the distribution of tests in Crystal Township and Ferris Township in Montcalm County.

Oil and Gas Picture

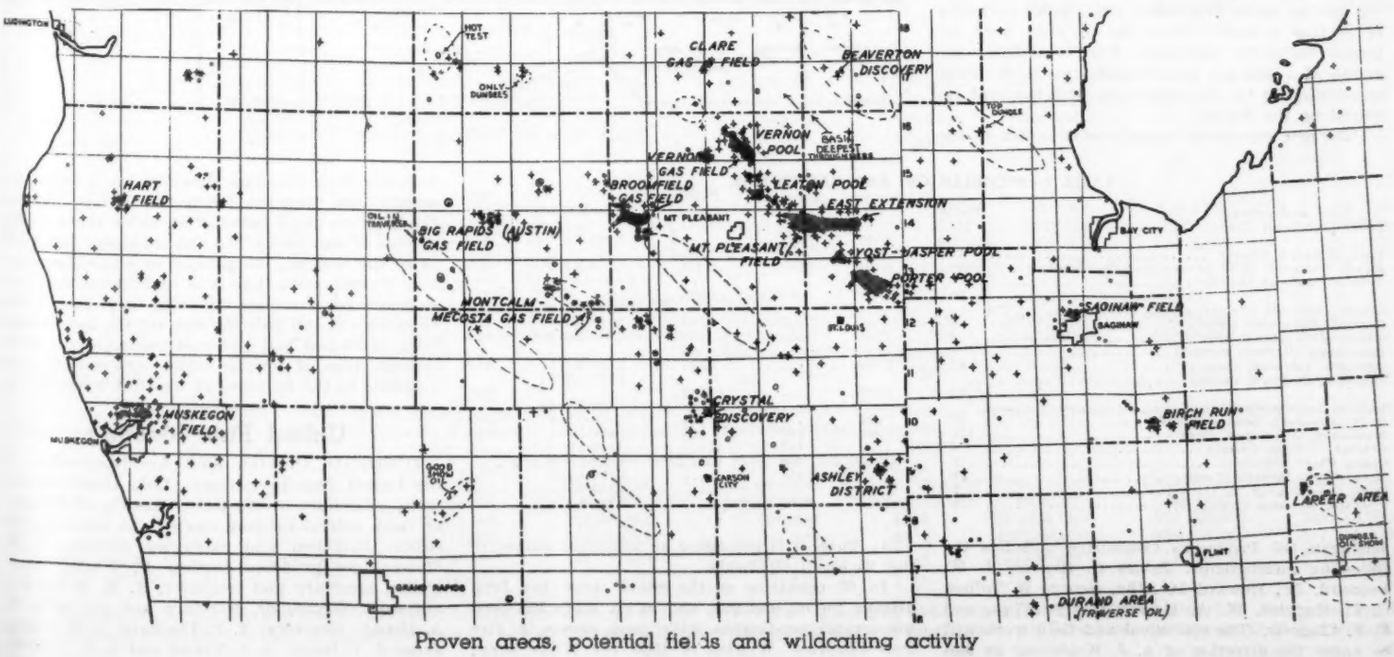
The oil and gas picture of Michigan is shown in Table 2.

Work has not advanced sufficiently in the Cass, Beaverton and Lapeer areas to indicate their relative importance. Although refining facilities have been increased in recent months by about 10,000 bbls. daily capacity, in Michigan, most of the oil produced must find markets outside of the State in a highly competitive time. The relatively high output of the Porter, Yost and Crystal Fields is probably retarding development in other areas with the possible exception of Ogemaw. The three fields mentioned as producing most of the State's output are prorated. For instance, Crystal Field, with July 1 pressure production (or potential) estimated at 7,976 bbls. a day, is curtailed to a daily production in July of 4,264 bbls. on a basis of 50 per cent

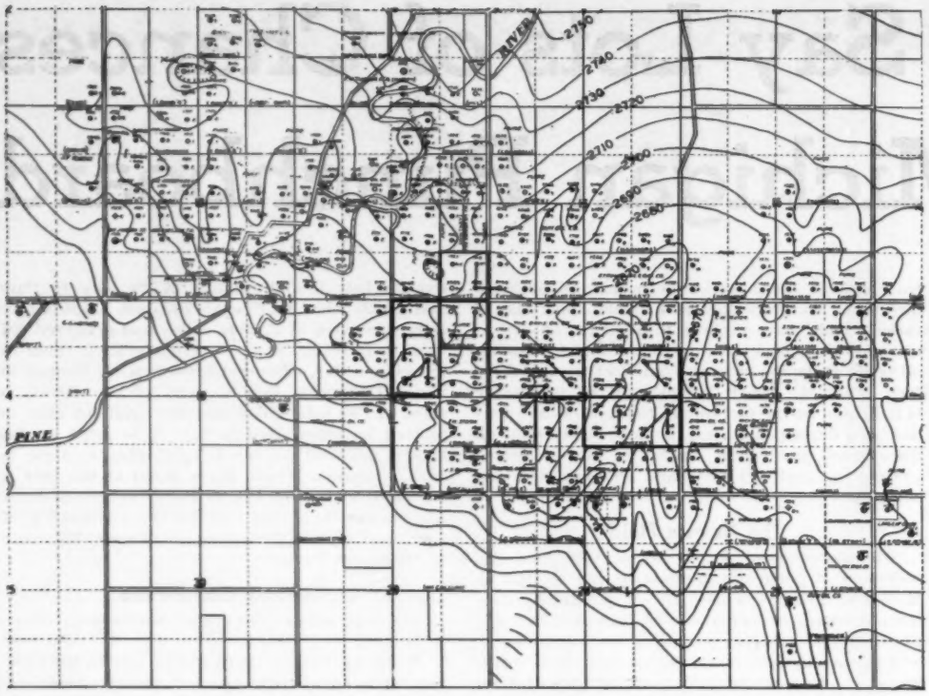
TABLE 1—MICHIGAN PRODUCTION—A RESUME BY YEARS AND BY POOLS*

Year—	Saginaw	Muskegon	Mount Pleasant	Leaton	Vernon	Porter Township	Oceana County	Yost	Ogemaw	Montcalm	Misc.	Totals
1925	4,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	4,000
1926	94,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	94,000
1927	434,000	1,928	.....	.....	.....	.....	.....	.....	.....	.....	....	435,928
1928	231,000	334,601	27,019	.....	.....	.....	.....	.....	.....	.....	....	592,620
1929	113,559	3,157,668	1,367,836	1,948	.....	.....	.....	.....	.....	.....	228	4,641,239
1930	89,287	1,297,962	2,378,775	138,470	22,616	.....	.....	.....	.....	.....	1,019	3,928,229
1931	61,876	531,147	2,647,879	299,621	244,166	944	.....	.....	.....	.....	....	3,785,633
1932	63,616	478,728	5,795,860	237,870	322,534	7,381	329	19,362	.....	.....	165	6,925,665
1933	55,066	276,174	3,128,804	303,023	538,708	3,354,175	45,853	219,485	18,974	1,661	72	7,942,995
1934	48,226	157,425	1,512,933	244,950	907,239	7,168,161	58,814	275,807	124,922	102,600	682	10,602,759
Total	1,194,730	6,236,633	16,859,106	1,225,882	2,035,083	10,530,661	104,996	514,654	143,896	104,261	2,166	38,952,068

*After a compilation by Kurt H. de Cousser from Michigan Geological Survey production figures.



Proven areas, potential fields and wildcatting activity



Contour map of Porter Township Field

proration on output over 75 bbls. a day for each well. However, while the allowable for this new field was 100,899 bbls. in June, runs for the month totaled 209,048 bbls.

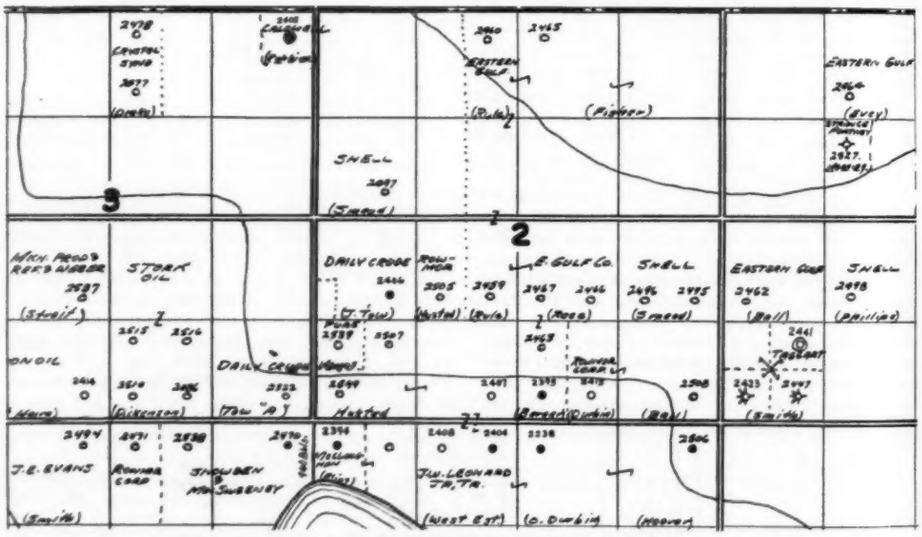
Potential and Runs

Potential production and actual runs from wells in Michigan oil fields in the week ending July 1 are shown in the following table:

Pool—	Wells	Potential	Runs
Porter	314	29,964	23,677
Yost	20	5,055	3,295
Greendale	102	3,477	3,477
Vernon-Leaton	97	2,634	2,634
Crystal-Montcalm	8	7,976	6,968
Home-Montcalm	4	519	239
Beaverton	1	45	45
Ogemaw	62	1,305	1,305
Saginaw-Lapeer	96	100	100
Oceana	17	34	34
Muskegon	116	300	300
Michigan totals	1,038	51,409	42,674

Following the Supreme Court decision which ended whatever effectiveness the administration of the oil code might have had, the proration organization of Michigan was changed to meet conditions. The Michigan Producers Proration Committee was set up in September, 1933, under authority of Section 5, Article 3, of the oil code, with expenses borne by producers, who contribute one-eighth of a cent per barrel production to the fund in addition to the severance tax of 2 per cent required by the State.

The new regulatory commiteee is known as the Michigan Oil Producers Committee and has the following membership: James C. Graves, J. W. Leonard, Jr., Howard D. Atha, George B. Talbot, C. L. Maguire, W. A. Hower, George Fink, and E. F. Claggett. The statistical and field work will be under the direction of A. J. Weideman as umpire. Offices of the committee will be maintained in conjunction with the Oil and Gas Association of Michigan in the Hersee Building, Mount Pleasant, after July 10.



Distribution of tests in Crystal Township

TABLE 2—MICHIGAN OIL AND GAS PICTURE

Field and county—	Wells	Proven acreage oil	Proven acreage gas	Runs July 1	Ave. depth	Oil grav.
Porter, Midland County	211	8,480	...	23,677	2,405-2,450	40.4
Yost, Midland County	19		...	3,295		
Mount Pleasant, Midland and Isabella Counties	364	9,120	...	3,477	3,510-3,575	41.8
Vernon, Isabella County	96	1,320	880	2,634	3,510-3,575	44.5
Leaton, Isabella County					3,675-3,700	43.0
Crystal, Montcalm County	8	....	...	6,968	3,189-3,198	42.5
Home, Montcalm County	4	160	...	239	3,045-3,120	42.0
Beaverton, Gladwin County	1	....	...	45	.....	...
Ogemaw, Ogemaw County	60	2,000	...	1,305	2,650-2,770	36.0
Saginaw, Saginaw County	93	1,660	...	100	1,820-1,850	43.0
Lapeer, Lapeer County					1,480-1,482	
Hart (Oceana), Oceana County	18	200	...	34	1,860-1,900	34.0
Muskegon, Muskegon County	118	4,200	200	300	2,050-2,075	37.0
Gratiot, Gratiot County	4	....	488	.....	500-510	...
Clare, Clare County	7	....	388	.....	1,400-1,420	...
Broomfield, Isabella County	38	....	6,320	.....	1,360-1,460	...
Cass, Cass County	1	....	...	.....	3,820-3,880	...
Mecosta, Mecosta County	8	....	3,500	.....	1,425-1,450	...

In Table 1 is presented an historical survey of the Michigan oil fields.

In 65 countries of the State there has been drilling for oil and gas, and in six there has been commercial production with good shows in five more counties. Writing in 1930 Ver Wiebe says: "The Dundee near the base has produced some oil and nearly always has a show of oil in it. The Traverse formation produces oil at Muskegon, and the Berea, which lies directly above the Devonian, probably derives its contained oil from the black shales in the system. The maximum thickness of the system (Devonian) is approximately 1,600 feet. The Silurian is also well represented in the Michigan basin. Limestones and dolomites make up the bulk of it and the total thickness is nearly 2,400 feet. The usual shales and thin limestones of upper Ordovician age and the massive limestones of middle and lower Ordovician are present and can be reached by the drill around the borders of the basin. The Cambrian is represented probably by the Lake Superior sandstone, a formation which has been reached in the Upper Peninsula, but which has not been reached in wells of the Lower Peninsula. The rock would make an excellent reservoir. The Trenton and Black River limestones are very persistent and may yield petroleum at structurally favored localities. The depth of the Trenton is great except around the borders of the basin."

The contour map of the Porter-Yost Field indicates the type of structure upon which geologists base predictions of new fields in the State.

New Cross License Agreement Completed by Sun Oil Co.

Gasoline Products Co. and Sun Oil Co. have entered into a new license agreement pertaining to the cracking patents of the two companies. The Sun Oil Co. was one of the first users of the Cross process under license from Gasoline Products Co., granted in 1922 for operation at the company's Marcus Hook, Pa., refinery.

Under the new agreement the Sun Oil Co. has acquired from Gasoline Products Co. a broad immunity and Gasoline Products Co. has obtained the right to grant immunities under the cracking patents of Sun Oil Co. No announcement was made as to the Sun Oil Co. patents or as to the monetary consideration, but it is understood that substantial cash payments are being made to Gasoline Products Co. and that the Sun Oil Co. has successfully developed and patented an important once-through type of process which will hereafter be available to the licensees of Gasoline Products Co.

United Fuel Meeting

TORONTO, Ontario, July 6.—Shareholders of the United Fuel Investments, Ltd., Hamilton, Ontario, subsidiary of the Union Gas Co. of Canada, at their annual meeting elected the following officers: President and managing director, S. A. Morse; vice president, Arthur F. White; comptroller, secretary and treasurer, A. R. McKenzie; assistant comptroller, secretary and treasurer, G. A. Henry; directors: T. P. Pinckard, J. M. Pigott, Judge J. T. Gauld, J. A. Fraser and R. L. O'Brien.

Industry's Operations First Half Year Left No Handicap to Second

By C. O. WILLSON

Those who are taking an optimistic or pessimistic attitude in the present oil situation can find support for their contentions in the latest report of the Bureau of Mines covering producing and refinery operations for May with accumulative data for the first five months of 1935 and 1934. Other analyses have resulted in a middle-of the road position with the feeling that available data on operations do not as yet definitely point to either weakness or strength in markets with price trends for the last half year largely dependent on developments in supply and demand starting July 1. In brief what happens the last half year, according to these observers, is dependent on current operations and not on any hangovers from the operations of the first half year.

On the strong side of the oil situation, the May data continue to point to heavy consumption. Crude production was 45,600 bbls. greater than in April and 84,000 bbls. greater than in May, 1934, but the May report shows that all this additional supply found outlets with a sizeable reduction in stocks in California, a small increase in the remainder of the country and a reduction in total stocks of refinable crude oil of 1,200,000 bbls. There was a seasonal withdrawal from storage of gasoline, which was larger than had been expected. Total stocks of all oils were reduced more than one million barrels during the month. Based on the demand for the first five months these stocks of all oils at the end of May amounted to 201 days' supply, as compared with 212 days' supply at the end of May, 1934, and 241 days' supply on May 31, 1933. Based on demand in May the stocks of all oils represented 192 days' requirements.

The domestic gasoline demand based on the accumulative totals for the first five months continues to run ahead of last year with a gain of 3.7 per cent and a new all time record in domestic requirements. The domestic kerosene demand also continues to establish a new peak with a gain of 3.3 per cent over last year when domestic consumption for the entire year was greater than any previous year.

The foregoing are among the favorable factors as revealed by a study of the Government's reports covering operations for the first five months. Many feel that these factors are so outstanding and important that any other data which might detract from their present or future significance can be ignored with assurance that the last half year will bring higher price levels.

Others are urging caution with emphasis placed on paying more attention to supplies rather than increased demand and their position has been supported over the past two weeks with scattered indications of weakness in both crude oil and refinery markets. They point to the fact that while for the country as a whole the increased crude oil production so far this year is being absorbed by refineries with no important increases in crude oil stocks, the evidence is not convincing that all of this expansion in refinery operations was needed to take care of current requirements for finished products. This situation is readily apparent from the summary of data given in the accompanying table.

The table shows that the actual total demand for refinery products for the first five months based on refinery shipments compared to the same period last year has varied from declines to small increases of which the largest is the 2.5 per cent increase in motor fuel demand. The gains in supplies in the case of gasoline, kerosene and gas oil and fuel oil have been much greater.

One of the products which has suffered from the increased refinery operations is kerosene. The total demand for kerosene despite the record domestic consumption is running slightly behind last year due to the decline in exports. There have been no outlets for the increased production of more than 7 per cent and stocks on May 31 were approximately one-third greater than May 31, 1934.

Crude Oil and Refinery Situation Summarized—First Five Months

Supply and Demand—Crude Oil (Bbls.)

First five months—	Total supply	Total demand	Excess Demand	Excess Pct.	Domestic production	Imports	Indicated domestic demand‡	Exports	Stocks refinable crude May 31§
1935	406,401,000	405,096,000	*1,305,000	.3	393,847,000	12,554,000	388,253,000	16,843,000	338,559,000
1934	382,738,000	381,160,000	*1,578,000	.4	368,640,000	14,098,000	366,113,000	15,047,000	355,883,000
Increase, 1935	23,663,000	23,936,000	.....	....	25,207,000	†1,544,000	22,140,000	1,796,000	†17,324,000
Increase, 1935	6.2%	6.3%	.....	....	6.8%	†10.9%	6.0%	11.9%	†4.8%

Supply and Demand—Refinery Products—Motor Fuels (Bbls.)

First five months—	Total supply	Total demand	Excess Demand	Excess Pct.	Domestic production	Imports	Domestic demand	Exports	Stocks May 31§
1935	180,657,000	171,231,000	*9,426,000	*5.5	180,637,000	20,000	161,656,000	9,575,000	61,173,000
1934	169,336,000	167,103,000	*2,333,000	*1.4	169,336,000	.....	155,868,000	11,135,000	61,628,000
Increase, 1935	11,321,000	4,228,000	.....	....	11,301,000	.....	5,788,000	†1,560,000	†455,000
Increase, 1935	6.6%	2.5%	.....	....	6.6%	.....	3.7%	†14.0%	†.7%
Kerosene									
1935	23,816,000	22,919,000	*897,000	*3.9	23,816,000	.....	20,151,000	2,768,000	7,295,000
1934	22,239,000	23,326,000	1,087,000	4.8	22,239,000	.....	19,493,000	3,833,000	5,470,000
Increase, 1935	1,577,000	†407,000	.....	....	1,577,000	.....	658,000	†1,065,000	1,825,000
Increase, 1935	7.1%	†1.7%	.....	....	7.1%	.....	3.3%	†27.7%	33.3%
Gas Oil and Fuel Oil									
1935	143,344,000	158,707,000	15,363,000	10.7	134,364,000	8,980,000	149,338,000	9,369,000	100,177,000
1934	138,502,000	158,751,000	20,249,000	14.6	132,860,000	5,642,000	147,043,000	11,708,000	106,279,000
Increase, 1935	4,842,000	†44,000	.....	....	1,504,000	3,338,000	2,295,000	†2,339,000	†6,102,000
Increase, 1935	3.4%	†.03%	.....	....	11.3%	59.1%	1.5%	†19.9%	†5.7%
Lubricating Oil									
1935	11,155,000	11,589,000	434,000	3.8	11,155,000	.....	8,192,000	3,397,000	8,192,000
1934	11,114,000	11,371,000	257,000	2.3	11,114,000	.....	7,977,000	3,394,000	7,977,000
Increase, 1935	41,000	218,000	.....	....	41,000	.....	215,000	3,000	215,000
Increase, 1935	.3%	1.9%	.....	....	.3%	.....	2.6%	.....	2.7%
Petroleum Wax (Lbs.)									
1935	205,261,000	195,415,000	†9,846,000	†5.0	193,760,000	11,501,000	108,795,000	86,620,000	145,982,000
1934	233,511,000	200,793,000	†32,718,000	†16.0	210,000,000	23,511,000	115,165,000	85,628,000	101,551,000
Increase, 1935	†28,250,000	†5,378,000	.....	....	†16,240,000	†12,010,000	†6,370,000	992,000	44,431,000
Increase, 1935	†12.1%	†2.7%	.....	....	†7.7%	†51%	5.5%	1.1%	43.7%

*Excess supply. †Decrease. Note—Total supply equals domestic production plus imports. Total demand equals domestic demand plus exports. Data on demand for refined products are based on refinery shipments. ‡Crude oil only. §Includes natural gasoline.

Crude Oil Runs to Stills and Total All Oils (Bbls.)

First five months—	Total imports§	Total exports§	Total crude to stills	Nat. gasoline production	% Gasoline yield from crude oil‡	Total supply all oils*	Total demand all oils*	Stocks all oils May 31
1935	21,712,000	43,086,000	378,381,000	15,602,000	46.4	431,892,000	427,700,000	568,340,000
1934	19,872,000	46,112,000	359,610,000	14,671,000	46.1	403,928,000	418,428,000	587,713,000
Increase, 1935	1,840,000	†3,026,000	18,771,000	931,000	.3	27,964,000	9,272,000	†19,373,000
Increase, 1935	9.2%	†6.8%	5.2%	6.3%	....	6.9%	2.2%	†3.3%

*Total all oils includes crude refined products, natural gasoline and benzol. †Decrease. ‡Includes natural gasoline blended at refineries. §Includes crude oil and refinery products. In case of gas oil and fuel oil and wax, imports includes only products for domestic use. All data based on Bureau of Mines reports.

California Operators Are Still On Spot On Curtailment

LOS ANGELES, Calif., July 8.—California operators are still on the spot as far as curtailment is concerned, and the situation is still as precarious as it was a few weeks ago. The possibility of a general price cut in crude oil has not been averted and it may come at any time if operators persist in dumping crude below the posted price and to ignore curtailment.

The situation is now nearing the point where drastic measures may be necessary. If the price is cut it will not be on the basis of 50 cents per barrel. All indications point to the probability it will be 25 or 30 cents for the highest grades.

Amerada Extends Fitts West

The first 27 wells on which potentials were taken in the Fitts Pool, beginning July 5, showed a total potential of 82,750 bbls. or an average of 3,065 bbls. per well. The total is 13,675 bbls. less than the potentials of the same wells when they where completed, or an average drop of 507 bbls. per well and a total drop of 16.5 per cent.

The Amerada Petroleum Corp., which recently drilled the most easterly well in the Fitts Pool in Section 28-2-7, has now the most westerly well in the same pool and it is a good one, No. 1 Norris, NW SE SE Section 26-2-6, a location west of Gus Dealey's big well, which produced so much oil through tubing that some of the operators thought there must be something wrong with casing. The Amerada well was completed in McLish at 4,391 feet but is a Bromide sand producer. It made 2,867 bbls. in 7 hours and 45 minutes through casing and tubing. The casing production record by hour was 400, 685, 665 and 577 bbls. and the tubing record 150, 125, 150 and 115 bbls., the last in 45 minutes.

New Pool in Kansas

Hartman & Blair may have opened a new pool in Kansas with their No. 1 Rexroat, NE NW NW Section 31-14-14w, Russell County. It had Siliceous lime at 3,179 feet (subject to correction), and stood with 450 feet of oil in the hole from 3,180-85 feet. It was drilled a foot deeper and the crew recovered five bailers of oil per hour.

Call Pipe Line Hearing

WASHINGTON, D. C., July 8.—A hearing on pipe line rates and gathering charges and reductions made therein in the past year and a half has been called for July 23 by the Interstate Commerce Commission. A statistical report made public with the call for the hearing disclosed that many companies had reduced rates in 1933 and 1934, all attributing this to competitive conditions, and that most of the companies had a minimum tender requirement of 100,000 bbls. for interstate movement.

Lower Gas Rate Ordered

AUSTIN, Tex., July 10.—The Third Civil Appeals Court today reversed the jury decision sustaining Lone Star Gas Co.'s 40-cent gate rate on natural gas in 250 Texas Cities and towns and rendered judgment upholding the Railroad Commission's order for a 32-cent rate.

DEATHS

WAYNE K. GLENN, prominent Pennsylvania refiner, died in a Butler, Pa., hospital July 5 after an illness of several weeks. Mr. Glenn was vice president in charge of sales of the Pennsylvania Refining Co.

MRS. ANNA FLANAGAN, mother of three men prominent in the oil business, died at her home in Tulsa, Sunday, July 7, age 81 years. The sons are John E. Flanagan, head of the land department of Texas Co.'s Oklahoma-Kansas division; James P. Flanagan, oil producer; and Michael J. Flanagan, vice president of the Gaso Pump & Burner Co. and Tulsa Iron Works Co., all residing in Tulsa. Two daughters, Mrs. O. D. Hennage of Tulsa, and Mrs. Thomas J. Hanlon of Independence, Kans.; one sister, Mrs. Mary Stoffer of Bradford, Pa., nine grandchildren and four great grandchildren also survive.

WILLIAM ENRIGHT, age 80, for 20 years a producer in the Bradford Field, and for 39 years previously an employe of the National Transit Co., and South Penn Oil Co., died at Bradford on July 2. Mr. Enright's father purchased the Daniel O'Day farm near Ellicottville, N. Y., when Mr. O'Day became managing head of the Standard Oil Co.'s pipe line system, and young Enright went to work for the United Pipe Lines five years before the system was extended to the Eastern seaboard. He was a member of the producing firm of Bovaird & Enright at the time of his death.

Oil Marketing Code Meetings Are Being Continued

NEW YORK, July 8.—The new code of marketing practices in the oil industry which is to take the place of the oil code will not be completed in its final form for action by the board of directors of the American Petroleum Institute before next week, it was indicated here today. Meetings of the code committee, of which C. E. Arnott is chairman, have been held here and in Washington during the past two weeks and it is understood a tentative draft was completed last week.

C. E. Arnott and some of the other members of the committee were in Chicago today, where it was understood certain features of the proposed code would be discussed with representatives of major marketing units in that territory.

CONSTRUCTION NEWS

Old Dutch Increases Capacity Following Record Month

MUSKEGON, Mich., July 9.—The Old Dutch Refining Co. last week completed rearrangements and repairs to its skimming plant here increasing daily capacity from 3,000 to about 4,000 bbls., it was announced by John Borden, president and general manager.

The company, which erected the first modern independent refinery in Michigan here in 1929, last month completed the biggest month in its history running 71,000 bbls. of crude. The previous record month of 65,000 bbls. was experienced about two years ago.

About 75 per cent of present daily crude receipts is coming from the new Crystal Township, Montcalm County, pool by pipe line to Carson City and then to Muskegon by Grand Trunk Railroad. Another 15 to 20 per cent is still brought here by tank truck from the big Porter Township Pool, Midland County, with the rest obtained from Muskegon wells by pipe line.

Construction Line Completed

Portion of the line between Lebec and Torrance, Calif.

H. C. Price, Inc., Bartlesville, Okla., and Los Angeles, Calif., has just completed the welding of 88 miles of 10-inch oil line for the General Pipe Line Co. from Lebec to Torrance, Calif. This job was completed in 65 working days by three gangs of welders. Seamless pipe with double bell joint and back-up ring was used. Macco Robertson and Lang Transportation Co. were the general contractors.

North Muskegon Extension

MUSKEGON, Mich., July 8.—The North Muskegon city council has adopted an ordinance which would grant a 30-year natural gas franchise to the Muskegon Gas Co. North Muskegon will be served with gas from the Austin Township, Mecosta County Field, through the American-Michigan pipe line if the ordinance is approved at a special election early next month.

The company plans to lay a $30,000 extension of its present Greater Muskegon mains to serve the North Muskegon residential district beginning early in September. Preliminary negotiations were conducted by Dean W. Flowers, vice president and general manager of the Muskegon Gas and American-Michigan Pipe Line Companies, and Mayor Ernest Eimer.

Completing Absorption Plant

GALGARY, Alberta, July 9.—The Royalite Oil Co.'s new gasoline absorption plant on the Sterling Pacific lease in South Turner Valley is practically complete, and will be in full operation this month. The plant has a daily capacity of 60,000,000 feet of wet gas, and will insure more complete naphtha recovery from wells in this area. The Royalite company already has a plant of 115,000,000 feet daily capacity in the central Turner Valley Field and Gas & Oil Products, Ltd., operates a plant of about 80,000,000 feet capacity on the Mercury lease in Section 4-19-2w5.

New Storage Terminal

As evidence of increased business in upper New England, the Tide Water Oil Co. has started construction of a new storage terminal on the Penobscot River at Bangor, Maine. Five tanks totaling more than 3,000,000 gallons storage capacity will be erected with provision for the addition of two more tanks. The terminal construction will also include a district office, large warehouse, dock for tanker deliveries and facilities for railroad and truck loading.

Construction work will be rushed in order to complete the terminal by the latter part of September. About 200 men will be employed during the building period.

Reconditioning Line

The Magnolia Refining Co. of Beaumont, Tex., is preparing to recondition about 50 miles of 3-inch gasoline line from its Luling refinery at Luling, Tex., to San Antonio. This line was laid by the Magnolia Pipe Line Co. about four years ago, but will be reconditioned under supervision of the refining unit of Magnolia. It was coated and wrapped at the time of laying and is to be similarly treated and covered after reconditioning. Electric welding is to be used in spot and other welding.

Large Water Line for Fort Smith

Fort Smith, Ark., has let a turnkey contract to Williams Brothers, Tulsa, for the laying of 23 miles of new 27-inch steel pipe as part of a new water system to be installed for that city. This line is to be laid to the source of water supply in the hills nearly due east of Fort Smith and will follow a right of way secured between the source and the city through the rough hill country of that area. There will be considerable rock work on this line which is to be both coupled and welded. The new steel pipe, still to be ordered, will weigh about 115 pounds per foot and the contract now let involved the expenditure of about $750,000. Work is to start in about 30 days.

Mid-Continent July Crude Runs Gain Justified by Demand for Gasoline

By GEORGE WEBER

During the month of July, Mid-Continent refiners will add an estimated 10,000 bbls. daily to their crude runs, totalling about 485,000 bbls. This increase is more than justified by the greater consumption which July and August will bring, and it is probable that increased schedules and resumption of operations in plants now shut down will bring the daily average higher than now estimated. Variable recognition of gasoline allocations further detracts from the accuracy of a fixed estimate at the present time.

Oklahoma refineries with runs totalling more than 150,000 bbls. daily show the greatest increase, the trend revealing a fairly representative cross section of operations throughout the state. Many refiners reporting estimates at the same level as June name as their reasons for this consistent operation, the adherence to the allocation figures.

East Texas Schedules

With estimated increases in runs of more than 3,000 bbls. daily, East Texas places second in advanced refining schedules. Change in ownership has resulted in the reopening of several plants. A growing interest of outside refiners in operations in the field is also becoming evident. This might lead to the development of larger and more substantial plans in East Texas making it a more permanent and possibly a more reputable refining district. The Premier Refining Co. is now conducting test runs on its newly completed plant at Greggtown, and by the end of the month, may be in commercial operation. Another refining company is contemplating the addition of cracking units to its East Texas refinery. Several changes in ownership transpired during June. The Admiral Refining Co. of Kilgore was formerly the Roco Refining Co. The East Texas Cracking Co. succeeds the Pine Refining Co. of Camp Switch. The L. & G. Refining Co. plant at Gladewater is now owned by the Riverside Refining Co. The Stag Refining Co. and the Swastika Refining Co., both of Kilgore succeed the Illinois Refining Co., and the Triangle Refining Co. respectively. The Alamo Refining Co. is again operating its refinery at Camp Switch. In the event of a greatly increased demand for gasoline during the month, other plants will doubtless start up again.

Southwest Texas refiners also report an upturn in refining activities for the month. Some interest is being manifest in this portion of Texas for new refineries, centered, however, on the Gulf Coast and in the Rio Grande Valley where water transportation is available. Toward the north and east of the area, refiners are holding to allocations and in many cases curtailing operations with the result that the West Texas and Panhandle and North Central Texas districts show estimated declines in amount of crude to be refined. The Texas Co.'s plant at El Paso is closed. Recent floods have had some effect on activities in these sections, hampering regular crude supply, and cutting the local demand for gasoline upon which the majority of West Texas refiners rely.

July operations in Arkansas and North Louisiana, continuing at the same level as in June are consistent among the separate refiners in those states.

The higher consumption of gasoline this summer is shown in a comparison of this month's crude runs with those of July, 1934. Although the July gain in operations this year is not as great as the estimated 20,000 bbl. increase of a year ago, the total for the Mid-Continent is held at about 20,000 bbls. daily above July, 1934. The comparison is further favored by the fact that the East Texas refiners a year ago were running more crude than they are at present. Due to the low state of gasoline reserves in storage and the lack of general recognition of gasoline allocations, operations will doubtless be more flexibly affected by demand this year than they were a year ago.

OKLAHOMA

Company and location—	Daily capacity	Aver. daily runs July	Aver. daily runs June
Anderson-Prichard Oil Corp., Cyril	6,000	4,500	4,500
Associated Petroleum Corp., Allen	8,000	(*)	(*)
Barnsdall Oil Co., Barnsdall	6,000	3,500	3,500
Barnsdall Oil Co., Okmulgee	10,000	3,000	5,000
Bell Oil & Gas Co., Grandfield	4,500	2,700	2,700
Black Gold Refining Co., Oklahoma City	3,000	2,000	1,200
Century Petroleum Corp., Oklahoma City	2,500	(*)	(*)
Champlin Refining Co., Enid	16,000	6,500	6,500
Continental Oil Co., Ponca City	30,000	21,500	15,000
Crescent Refining Co., Holdenville	1,000	(*)	(*)
Cushing Refining & Gasoline Co., Blackwell	1,700	1,500	1,500
Cushing Refining & Gasoline Co., Cushing	6,700	4,100	4,100
Deep Rock Oil Corp., Cushing	10,000	9,000	9,000
Eason Oil Co., Enid	5,000	2,800	2,500
Empire Oil & Refining Co., Okmulgee	4,000	2,500	2,300
Empire Oil & Refining Co., Ponca City	12,000	9,200	8,900
Globe Oil & Refining Co., Blackwell	7,500	(*)	(*)
Government Refining Co., No. 1, Oklahoma City	1,000	(*)	(*)
Government Refining Co., No. 2, Oklahoma City	3,500	(*)	(*)
Government Refining Co., No. 3, Seminole	800	(*)	(*)
Hanger Refining Co., Oklahoma City	1,000	(*)	(*)
Johnson Oil Refining Co., Cleveland	6,000	4,000	4,000
Major Petroleum Products, Oklahoma City	2,000	400	400
Marathon Oil Co., Bristow	5,000	2,260	2,500
Mid-Continent Petroleum Corp., West Tulsa	40,000	19,000	19,000
Monarch Refining Co., Oklahoma City	1,000	300	300
Omar Refining Co., Garber	8,000	2,500	2,500
Paramount Refining Co., Oklahoma City	2,000	700	700
Peppers Gasoline Co., Oklahoma City	500	200	200
Phillips Petroleum Co., Okmulgee	6,000	4,500	4,700
Pure Oil Co., Muskogee	9,000	8,000	8,000
Rock Island Refining Co., Beckett	6,000	3,000	3,000
Sinclair Refining Co., Sand Springs	8,000	2,800	3,000
Sinclair Refining Co., West Tulsa	6,000	(*)	(*)
Sooner State Refining Co., Oklahoma City	700	400	(*)
Sun Oil Co., Yale	5,000	2,400	2,400
Sunray Oil Co., Allen	7,000	2,580	2,800
Texas Co., West Tulsa	15,000	12,000	12,000
Tide Water Oil Co., Drumright	15,000	10,500	9,500
Triangle Producing & Refining Co., Oklahoma City	1,000	400	400
Wilcox Oil & Gas Co., Bristow	5,000	3,000	2,500
Wirt Franklin Petroleum Corp., Ardmore	4,000	(*)	(*)
Yale Oil Corp., Yale	2,000	(*)	(*)
Total	294,400	151,740	144,600

*Shut down.

NORTH CENTRAL TEXAS

Company and location—	Daily capacity	Aver. daily runs July	Aver. daily runs June
Allstate Refining Co., Thrall	2,500	1,000	1,000
Baird Refining Co., Baird	1,500	1,300	1,300
Canyon Oil & Gas Co., Inc., The, Cisco	500	(*)	(*)
Continental Oil Co., Wichita Falls	6,000	3,700	3,200
Co-operative Consumers Refinery, Inc., Megargel	1,000	200	200
Empire Oil & Refining Co., Gainesville	5,000	(*)	(*)
Exchange Petroleum Corp., Albany	500	250	300
Falls Refining Co., Wichita Falls	2,000	300	300
Gratex Refining & Fuel Co., Graham	500	170	200
Gulf Refining Co., Fort Worth	10,000	3,390	3,700
Gulf Refining Co., Sweetwater	5,000	3,840	4,000
Haskell Oil Refining Co., Breckenridge	200	(*)	(*)
Hightower Oil & Refining Corp., Brownwood	750	300	400
Hill Refining Co., Ballinger	80	50	50
Jacksboro Refining Co., Jacksboro	50	50	50
LaSalle Petroleum Co., Burkburnett	3,500	700	700
Magnolia Petroleum Co., Fort Worth, No. 1	12,000	4,350	5,500
Marathon Oil Co., Fort Worth	5,000	3,200	3,700
Moutray Refining Co., Hawley	600	300	300
Meunster Refining Co., Meunster	300	150	150
New Deal Refining Co., Abilene	300	(*)	(*)
Nolting Refining Co., Sweetwater	1,000	(*)	(*)
Norgold Refining Co., West Olney	400	200	200
Olney Oil & Refining Co., North Olney	3,000	2,000	1,850
Omega Refining Co., Brownwood	200	(*)	(*)
Phoenix Refining Co., Hawley	800	500	500
Panhandle Refining Co., Wichita Falls	5,000	2,500	2,500
Panhandle Refining Co., Leuders	1,200	700	700
Pentex Refining Co., Echo	400	(*)	(*)
Pilot Point Refining Co., Pilot Point	500	100	100
Sinclair Refining Co., Fort Worth	5,000	2,500	2,500
Southtex Refining Co., Trent	250	(*)	(*)
Southland Refining Co., Olney	1,000	(*)	(*)
Starlight Refining Co., Inc., Ballinger	500	300	300
Star Refining & Producing Co., Fort Worth	1,200	(*)	(*)
Superior Refining Co., Tiffin	800	(*)	(*)
Taylor Refining Co., Taylor	6,000	1,000	1,000
Taxman Refining Co., Wichita Falls	3,500	2,500	2,500
Texas Pacific Coal & Oil Co., Fort Worth	3,000	3,000	2,000
Texas Pacific Coal & Oil Co., Caddo	1,000	700	700
Tucker Refining Co., Wichita Falls	200	150	150
Waggoner Refining Co., Electra	6,000	2,500	2,500
Watt Refining Co., Brownwood	200	200	200
Total	98,430	42,100	44,050

*Shut down.

SOUTHWEST TEXAS

Company and location—	Daily capacity	Aver. daily runs July	Aver. daily runs June
Amsco Refining Co., Mirando City	2,000	1,500	1,200
Bee Oil & Refining Co., Pettus	1,000	500	500
Capital Refining Co., Luling	2,500	(*)	(*)
Chapa Refining Co., Laredo	100	50	50
Citizens Refining Co., Luling	200	50	50
Humble Oil & Refining Co., San Antonio	5,000	3,050	2,500
Magnolia Petroleum Co., Luling	7,000	5,790	5,500
Pettus Refining Co., Pettus	1,000	800	700
Phoenix Refining Co., San Antonio	500	500	500
Pioneer Oil & Refining Co., Somerset	2,000	900	900
Rado Refining & Producing Co., McAllen	500	200	250
Texas Co., San Antonio	3,000	3,000	3,000
Texas Petroleum Products Co., Somerset	1,500	250	250
Total	26,300	16,590	15,000

*Shut down.

NORTH LOUISIANA

Company and location—	Daily capacity	Aver. daily runs July	Aver. daily runs June
Acme Refining Corp., Monroe	100	50	50
Bayou State Oil Corp., Hosston	750	150	150
Griswold Refining Co., Shreveport	2,500	1,500	1,500
Louisiana Oil Refining Co., Shreveport, Bossier	30,000	18,000	18,000
Pelican Refining Co., Converse	100	50	50
Shoreline Oil Co., Lewis	1,000	1,000	1,000
Spartan Refining Co., Shreveport	12,000	(*)	(*)
Stanolind Oil & Gas Co., Vivian	3,500	2,000	2,000
Texas Co., Shreveport	7,000	(*)	(*)
Total	56,950	22,750	22,750

*Shut down.

(Continued on Next Page)

ARKANSAS

Company and location—	Daily capacity	Aver. daily runs— July	June
Berry Asphalt Co., Waterloo	2,000	1,000	1,000
Henry H. Cross Co., Smackover	6,000	3,500	3,500
Lion Oil Refining Co., El Dorado	12,000	9,000	9,000
Macmillan Petroleum Products Co., Norphlet	2,300	2,000	2,000
Ouachita Valley Refining Co., El Dorado	2,500	(*)	(*)
Root Refining Co., El Dorado	10,000	5,000	5,000
Simms Co., Smackover	3,000	(*)	(*)
Stephens Refining Co., Stephens	750	250	250
Total	38,550	20,750	20,750

*Shut down.

KANSAS

Company and location—	Daily capacity	Aver. daily runs— July	June
Barnsdall Oil Co., Wichita	4,000	3,000	2,500
Derby Oil Co., Wichita	6,000	4,800	6,000
Dickey Refining Co., McPherson	2,500	1,700	1,500
Eldorado Refining Co., Eldorado	5,000	4,000	4,000
Falcon Refining Co., Inc., Great Bend	1,200	800	500
Globe Oil & Refining Co., McPherson	10,000	10,000	10,000
Kanotex Refining Co., Arkansas City	12,000	5,000	5,000
Kansas Gas & Gasoline Co., Winfield	500	200	200
Kreuger Refining Co., Laton	150	50	50
National Refining Co., Coffeyville	6,500	4,000	4,000
Petroleum Products Co., Chanute	1,000	1,000	1,000
Phillips Petroleum Co., Kansas City	18,000	11,600	12,000
Security Petroleum Co., Chase	3,100	(*)	(*)
Shell Petroleum Corp., Arkansas City	20,000	17,000	17,000
Sinclair Refining Co., Coffeyville	12,000	9,000	9,000
Sinclair Refining Co., Argentine	9,500	7,500	7,500
Skelly Oil Co., Eldorado	23,000	17,000	16,000
Socony-Vacuum Oil Co., Inc., Augusta	16,000	15,000	15,000
Standard Oil Co. (Indiana), Neodesha	20,000	4,500	4,500
United Oil & Refining Co., Hutchinson	1,500	(*)	(*)
Vickers Petroleum Co., Potwin	3,500	2,800	2,500
Total	177,450	118,950	118,250

*Shut down.

WEST TEXAS AND PANHANDLE

Company and location—	Daily capacity	Aver. daily runs— July	June
Active Oil Co., Arno	1,500	(*)	(*)
Aero Refining Co., Pecos	220	100	100
Coltex Refining Co., Colorado	12,500	3,000	3,000
Concho Refining Co., San Angelo	250	100	100
Coaden Oil Co., Big Spring	12,500	6,000	6,000
Danciger Refineries, Inc., Pampa	6,500	5,500	5,500
Gibson Oil Corp., Magic City	250	(*)	(*)
Howard County Refining Co., Big Spring	1,500	300	300
Mertzon Refining Co., Mertzon	100	50	50
McNutt Refining Co., El Paso	2,000	750	750
Panhandle Refining Co., Kings Mill	2,000	1,[illegible]	1
Paramount Refining Co., San Angelo	2,000	(*)	(*)
Pasotex Refining Co., El Paso	14,000	7,000	7,000
Phillips Petroleum Co., Borger	50,000	19,200	20,000
Shamrock Oil & Gas Co., Sunray	2,000	1,500	1,500
Shamrock Oil & Gas Co., Meldavis	1,500	1,200	1,200
Sinclair Refining Co., El Paso	2,500	(*)	600
Texas Co., El Paso	2,000	1,000	1,000
Texas Co., Amarillo	4,000	3,000	3,000
West Texas Refining Co., Pecos City	6,000	(*)	(*)
Wickett Petroleum Co., Wickett	2,500	600	600
Total	125,820	55,900	57,100

*Shut down.

EAST TEXAS

Company and location—	Daily capacity	Aver. daily runs— July	June
Acme Refining Co., Gladewater	1,250	550	430
Adams Refining Co., Big Sandy	1,000	(*)	200
Admiral Refining Co., Kilgore	2,000	1,600	(*)
Alamo Refining Co., Camp Switch	2,500	1,100	(*)
Alton Refining Co., Gladewater	1,000	240	(*)
Apex Refining Co., No. 1, Gladewater	4,500	(*)	500
Apex Refining Co., No. 2, Gladewater	2,000	(*)	400
Artex Refining Co., No. 1, Arp	2,000	(*)	200
Bartlett Refining Co., Kilgore	2,500	(*)	(*)
Beacon Oil & Refining Co., Henderson	4,000	500	400
Blue Diamond Refining Co., Gladewater	1,500	(*)	(*)
Boneta Refining Co., Joinerville	500	(*)	(*)
Bradley Refining Co., Kilgore	2,000	(*)	(*)
Carnation Refining Co., Gladewater	1,500	300	50
Century Refining Co., Friars Switch	2,500	1,240	1,400
Chief Refining Co., Gladewater	2,000	1,200	1,000
Condor Refining Co., Kilgore	700	630	(*)
Danciger Refineries, Inc., Longview	10,000	(*)	(*)
Deacon Refining Co., Turnerstown	500	(*)	(*)
East Texas Cracking Co., Camp Switch	4,200	900	(*)
East Texas Refining Co., No. 2, Longview	10,000	6,300	8,000
East Texas Refining Co., No. 3, Friars Switch	12,000	(*)	(*)
Friar Topping & Refining Co., Friars Switch	2,000	(*)	(*)
Gilliland Refining Co., Gladewater	4,000	2,800	2,800
Gilliland Refining Co., Overton	5,500	1,960	2,500
Gilmer Refining Co., Gladewater	1,000	(*)	(*)
Godlin Refining Co., Gladewater	500	(*)	(*)
Goodson, Gentry, Carles Refining Co., Gladewater	1,000	(*)	(*)
Hub Oil Refining Co., Reeds Switch	2,000	(*)	(*)
Humble Oil & Refining Co., Neches	5,000	450	1,200
Hunter & Knox Refining Co., Reeds Switch	750	(*)	(*)
Jackson Refining Co., Gladewater	1,750	(*)	220
Johnson Refining Co., No. 1, Kilgore	1,200	(*)	(*)
Johnson & Burnham, Kilgore	4,000	580	1,200
Kent Refining Co., Angus	4,000	(*)	(*)
Keystone Refining Co., Gladewater	1,250	500	300
Kilgore Reclamation Co., Kilgore	2,000	(*)	(*)
Klitex Reclamation Plans, Inc., Kilgore	500	(*)	(*)
Lake Refining Co., Gladewater	2,000	1,180	2,200
Lapren Refining Co., Kilgore	2,500	1,200	1,000
Lone Star Refining Co., Gladewater	2,000	3,000	3,240
London Topping & Refining Co., Overton	1,000	(*)	(*)
Longregg Refining Co., Kilgore	500	(*)	(*)
Magnolia Petroleum Co., Corsicana	5,000	3,600	3,700
Master Petroleum Co., Waco	1,000	250	300
McKain Refining Co., Gladewater	1,500	(*)	125
McMurray Refining Co., Arp	4,000	1,800	1,000
Minerva Refining Co., Minerva	2,000	220	240
Model Oil & Refining Co., Reeds Switch	1,250	(*)	(*)
National Refining Co., Camp Switch	1,000	(*)	(*)
Ocean Refining Co., Kilgore	2,200	(*)	(*)
Oil Refineries, Inc., Overton	4,000	2,100	2,000
Outdoor Refining Co., Kilgore	900	(*)	(*)
Overton Refining Co., Overton	3,000	(*)	(*)
Panama Refining Co., Kilgore	3,000	(*)	(*)
Pelican Refining Co., Gladewater	750	(*)	(*)
Pelican Refining Co., Gladewater	1,000	(*)	(*)
Pennant Refining Co., Kilgore	500	400	300
Petroleum Processing Co., Friars Switch	200	(*)	(*)
Phoenix Refining Co., Dallas	5,000	(*)	(*)
Pope Refining Co., Gladewater	1,500	(*)	(*)
Riverside Refining Co., Gladewater	1,500	300	800
Rusk Oil & Refining Co., Overton	3,500	600	600
Shoreline Refining Co., Kilgore	4,000	(*)	(*)
Simms Co., West Dallas	4,000	(*)	(*)
Sinclair Refining Co., Camp Switch	5,000	2,000	2,000
Smith Refining Co., No. 1, Gladewater	1,500	(*)	100
Southern Oil Refining Co., Tyler	3,000	1,000	1,500
Southport Refining Co., Kilgore	4,000	1,600	2,400
Stag Refining Co., Kilgore	1,200	200	(*)
Supreme Refining Co., Gladewtaer	1,200	(*)	(*)
Swastika Refining Co., Kilgore	2,000	300	600
Texas Co., Dallas	16,000	12,000	12,000
Texas Oil Products Co., Gladewater	2,000	2,500	1,800
Texas Refining Co., Kilgore	200	(*)	(*)
Texas State Refining Co., Kilgore	1,000	(*)	140
Texover Refining Co., Kilgore	1,000	600	(*)
Thompson & Bridges Refining Co., Gladewater	1,000	400	90
Trio Refining Co., Arp	2,100	1,300	1,300
Tyler, Tex., Producing & Refining Co., Tyler	15,000	5,000	1,000
Tyreco Refining Co., No. 1, Arp	2,500	200	1,700
Tyreco Refining Co., No. 2, Overton	3,000	1,700	700
Union Refining Co., Kilgore	3,000	(*)	(*)
Upshur Refining Co., Gladewater	1,000	(*)	(*)
Utah Refining Co., Kilgore	2,000	300	250
Wairip & Stewart Refining Co., Omega	1,000	(*)	(*)
Wichita Refining Co., Gladewater	1,000	(*)	(*)
Wolfe Refining Co., Kilgore	1,000	(*)	(*)
Total	239,300	65,430	62,115

*Shut down.

Mid-Continent Refinery Crude Runs

Average Daily Crude Runs (Barrels)

(Advance estimate compiled by The Oil and Gas Journal)

	1931	1932	1933	1934	1935
January	478,795	405,910	399,405	448,360	426,070
February	470,125	411,280	407,125	456,619	448,810
March	449,634	401,155	423,445	465,680	451,510
April	497,391	419,391	441,000	458,220	467,765
May	510,540	436,160	470,460	457,165	466,015
June	567,915	440,765	479,987	459,908	485,015
July	588,840	433,255	525,845	477,012	494,210
August	590,545	427,710	518,510	501,750	.....
September	588,105	430,430	526,749	499,830	.....
October	472,190	401,995	495,756	500,755	.....
November	480,440	408,180	481,335	500,445	.....
December	456,525	416,275	434,275	440,735	.....

Operations by Refinery Districts

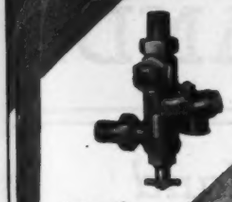
	July dly. crude capacity	July dly. crude runs	June dly. crude runs	July inc. over June (bbls. dly.)
Arkansas	38,550	20,750	20,750	.....
East Texas	239,300	65,430	62,115	3,315
Kansas	177,450	118,950	118,250	700
North Central Texas	98,430	42,100	44,050	*1,950
North Louisiana	56,950	22,750	22,750	.....
Oklahoma	294,400	151,740	144,600	7,140
Southwest Texas	26,300	16,590	15,400	1,190
West Texas and Panhandle	125,800	55,900	57,100	*1,200
Total	1,054,200	494,210	485,015	9,195

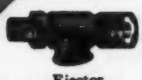
*Decrease.

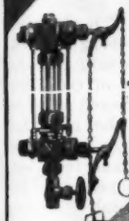
Removing trees for location in Quiriquire Field, eastern Venezuela

PENBERTHY LIQUID LEVEL GAGES

MEET ALL OIL INDUSTRY NEEDS


Automatic Injector


Ejector, Syphon or Jet Pump


"Navy Type" Liquid Level Gage

"Safeguard" Automatic Liquid Level Gage

"All-Iron" Automatic Liquid Level Gage

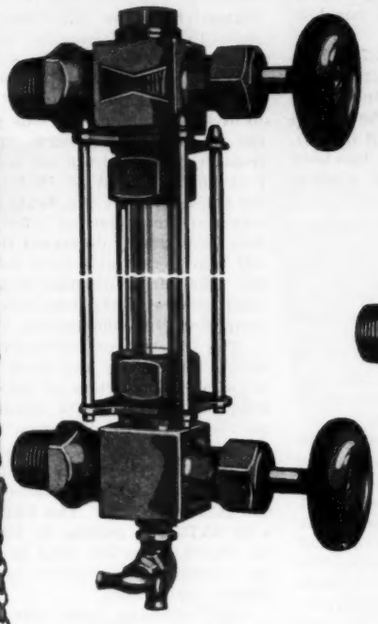
Gas Engine Lubricator

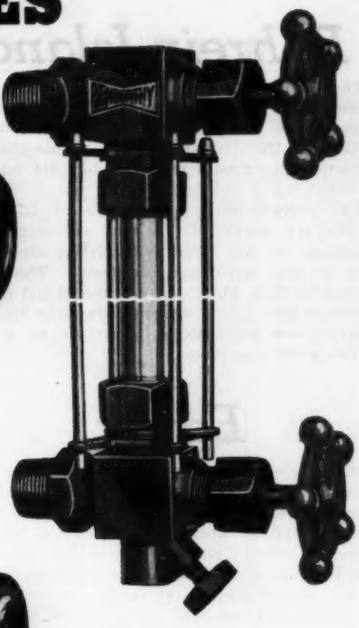
Snap Lever Oiler

Plain Brass Oil Cup

Plain Compression Grease Cup

"NAVY TYPE"
350 LBS. WORKING PRESSURE
500° F.


"SAFEGUARD"
300 LBS. WORKING PRESSURE
500° F.


"ALL IRON"
500 LBS. WORKING PRESSURE
750° F.

PENBERTHY PRODUCTS

THE three gages shown here are very popular in the oil industry because of their consistently dependable operation. All of them are ruggedly built of the highest grade materials by an organization that has had 48 years experience in the manufacture of quality products. The "Navy Type" is made from Navy Bronze Composition M, the "Safeguard" from high grade steam metal bronze and the "All Iron" from a modern electric iron alloy.

All these gages have automatic shut-off. Both upper and lower body have ball check valves that seat immediately and positively to prevent the loss of liquid when glass is broken. The hand operated stop valves may then be closed with safety and a new glass inserted.

Each gage is carefully tested and rigidly inspected at the factory. For detailed descriptions write for a copy of the new catalog.

Penberthy Liquid Level Gages are carried in stock by supply houses everywhere.

PENBERTHY INJECTOR COMPANY

DETROIT, MICHIGAN
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MANUFACTURERS OF QUALITY PRODUCTS SINCE 1886

Screw Plunger Grease Cup
Spring Compression Grease Cup
Automatic Electric Sump Pump
Automatic Cellar Drainer (Water or Steam Operated)
Dipless Air Cock

NEWS FROM FOREIGN LANDS

Bahrein Island

The crude oil production of the Bahrein Island concession of the Standard Oil Co. of California located in the Persian Gulf produced 307,564 bbls. of crude oil the first six months of this year. The production, the first six months of 1934 was 113,857 bbls.

The average daily production of 1,700 bbls. the first six months of this year was only a small percentage of the rated potential production of the wells that have been completed. The discovery well on this concession was completed in 1931. Since that time the California Standard has been preparing for large scale operations as markets are found for the crude oil.

Egypt

The Anglo-Egyptian Oilfields, Ltd., with headquarters in England, is negotiating with the Egyptian government for an exploration license to cover development work in a new section. The government at present is perfecting regulations under which licenses and leases will be granted.

The Anglo-Egyptian Oilfields' production in 1934 averaged 4,100 bbls. daily, according to the recently issued annual report. This was slightly less than the daily average in 1933. The report stated that new completions were confined to the eastern anticline, where it was hoped that a small extension in reserve territory might be found. The results were disappointing. Two wells in the main field were deepened and a small increase in production obtained. The company during the past year has installed additional modern equipment at its Suez refinery.

Great Britain

Total imports of crude oil and petroleum products into the United Kingdom in May showed an increase over April and May, 1934. This gain marks the continuance of a trend apparent in earlier monthly reports this year so that the accumulative figures for the first five months of this show a gain of approximately 7 per cent over the same period in 1934.

The Government's report for the first five months shows total imports of crude oil and refinery products for the first five months of this year of 1,181,069,000 imperial gallons or 33,745,000 American barrels. This compares with 1,104,790,000 imperial gallons or 31,565,000 bbls. Expressed in barrels daily the imports averaged 223,480 bbls. this year as against 209,000 bbls. for the same period in 1934. Taking into consideration the relatively small export and re-exports and the imports indicate that consumption of petroleum products in the United Kingdom is running ahead of last year by at least five per cent with an all time record.

The following table gives the imports for the first five months of 1935 and 1934: (data in imperial gallons).

	1935	1934
Crude oil	191,786,000	194,022,000
Gasoline	533,069,000	450,533,000
Fuel oil	274,128,000	249,679,000
Kerosene	86,632,000	100,395,000
Gas oil	46,726,000	55,367,000
Lubricating oil	41,629,000	44,629,000
Miscellaneous	6,859,000	10,551,000
Wax (cwt.)	431,314	422,667

Crude oil runs to stills at refineries in Great Britain based on the imports of crude oil are running slightly behind last year. The imports for the five months periods were 36,300 bbls. daily for 1935 and 36,700 bbls. for 1934. While exact information is not available the Government reports indicate that Iraq has become first or second as a supplier of crude oil for refinery operations in the United Kingdom. The report shows that Mexican imports of crude oil totaled 50,510,000 imperial gallons with 32,129,000 gallons from Persia and 28,481,000 gallons from Peru.

The crude oil imports from Mexico and Peru were about the same as in 1934 but imports from Persia (Iran) for the first five months of 1934 were 105,026,000 imperial gallons or more than three times those for the same period this year. Crude oil imports from "other countries" jumped from 234,000 gallons the first five months of 1934 to 61,411,000 gallons for this year. It is said that the latter figure is made up largely of imports from Iraq which were not a factor in world markets until the fall of 1934. These indicate that the subsidiaries of the Anglo-Persian Oil Co., Ltd., which are the principal refineries in United Kingdom have greatly decreased their imports of crude oilf rom Persia and have substituted Iraq crude oil. The parent company is one of the four principal owners of the Iraq production and recently completed pipe line system.

The Dutch West Indies refineries of the Standard of New Jersey and Shell interests continue to be principal importers of gasoline into the United Kingdom accounting for more than 50 per cent of the total. The gasoline imports for the five month periods totaled 227,422,000 imperial gallons in 1935 and 200,957,000 gallons in 1934. Rumania was next with 116,909,000 gallons in 1935 and 67,170,000 gallons in 1934. The United States was third with 43,733,000 gallons in 1935, a decrease from the 56,402,000 gallon total in 1934. Other principal suppliers of gasoline are Rumania, Persia, Mexico and Russia.

The following table gives the principal suppliers of the remaining refinery products: (data in imperial gallons for first five months of 1935 and 1934):

	1935	1934
FUEL OIL		
Dutch West Indies	137,224,000	133,154,000
Persia	50,480,000	30,276,000
Mexico	44,247,000	24,564,000
KEROSENE		
Persia	35,823,000	28,751,000
Rumania	12,998,000	19,009,000
Mexico	12,493,000	8,303,000
LUBRICATING OILS		
U. S. A.	25,673,000	27,113,000
U. S. S. R.	6,652,000	8,003,000
Mexico	5,574,000	4,021,000
GAS OIL		
Rumania	12,217,000	16,561,000
U. S. A.	7,959,000	24,643,000

Official figures on the Board of Trade covering consumption of petroleum products in Great Britain for the first five months of 1935 and 1934 are as follows: (data in imperial gallons)

	1935	1934
Gasoline	374,607,944	348,217,961
Fuel oil	102,931,133	96,535,044
Naphthas	8,687,104	8,231,766
Kerosene	75,140,105	78,427,257
Lubricating oil	37,644,976	37,427,257
Gas oil	25,996,007	25,997,173
Miscellaneous oils	3,229,896	1,572,644
Total	628,237,165	599,646,767

Producing well catches fire in the La Salina (Lake Maracaibo field) of Venezuela. The well, No. 71 of Lago Petroleum Co., burned for 24 hours

Finland

A combination representing Finnish industrial interests is contemplating the establishment of a refinery in Finland to produce gasoline out of Estonian crude oil, according to Consul General Herbert S. Goold. The purpose of the combination is to found a Finnish company which would secure a concession to exploit certain oil shale deposits in Estonia in order to obtain raw materials for the refinery in Finland.

It is reported that preliminary negotiations have been started for the purchase of a shale oil plant owned by the Swedish Wallenberg concern at Kohtla in East Estonia, which is said to have a production capacity of 12,000 tons of crude oil per annum. The government is expected to support the enterprise by intrusting the company with supplying gasoline for the army and state-owned industrial establishments. Finland imported 68,469 metric tons of gasoline last year, an increase of 8,000 tons over the 1933 total.

Korea

Preliminary plans have been completed for the construction of a refinery in Korea. The Korean Petroleum Co. has been organized for this purpose with an authorized capitalization of 10,000,000 yen (approximately $3,000,000). The company will be owned by wealthy interests engaged in other lines of business in Korea and Japan. K. Hashmoto has been elected president of the company.

The refinery will be the first to be constructed in Korea. It is reported that the project has received the approval of Japanese government which is encouraging the construction of refineries owned and operated by Japanese interests.

U. S. S. R.

Exports of crude oil from the U.S.S.R. in April increased over previous months but total exports of crude oil and refinery products continue to run behind last year. The decrease for the first four months of this year was 27 per cent. The following table gives the exports by products for the first four months of 1935 and 1934: (data in tons)

	1935	1934
Crude oil	247,707	399,618
Gas oil	498,291	487,721
Gasoline	146,714	157,823
Lubricating oil	139,242	207,380
Kerosene	78,997	76,796
Wax	4,603	4,446
Total	1,118,803	1,422,057

Exports of crude oil and petroleum products from Rumania are increasing. They totaled 2,074,651 tons the first four months of 1935, a gain of 5 per cent over the same period in 1934.

Italy

Despite the efforts being made by the Italian government to enlarge domestic refinery operations, the gasoline output the first quarter of this year was 50 per cent less than the same period in 1934. The production for the latter period was 2,600 bbls. daily and 1,300 bbls. daily for the same period this year. This reduction is said to be due to the shutting down of cracking units which are now being rebuilt and enlarged. Construction work is under way at three Italian refineries. It is expected that gasoline production will total around 5,000 bbls. daily by the end of the year. The production of other refinery products this year has been at about the same rate as last year.

Another Leaf from the Book of Experience

WIGGINS BREATHER ROOFS *on East Texas Crude—*

TO determine evaporation losses from oil in standing storage, one oil company kept identical records for 71 days on two 118,000 bbl. tanks of East Texas crude. One tank had a cone roof and one a Wiggins Breather roof. The former showed a loss of 500 bbls. as calculated by gauging and 768 bbls. as determined by the Whitman vapor pressure method. The tank with the Breather roof showed practically no loss by either method.

The loss in 71 days in the cone roofed tank showed the following percentages by composition: propane, 16.75% of original liquid volume, I-butane, 6.05%, N-butane 4.49%, I-pentane, 1.66%, N-pentane, 1.26% and residue, 0.12%. This clearly shows the fact that evaporation loss robs oil of its most volatile fractions.

The Wiggins Breather roof stops breathing losses in standing storage by flexing up and down as the volume of vapor inside the tank expands and contracts. It is relatively low in cost, and can be installed on either new or old tanks.

This is only one of the several types of evaporation stopping equipment which we have developed to meet all storage conditions. Our many years of specialized experience is available to any oil company interested in stopping this needless loss.

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Houston---2919 Main Street
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Birmingham--1536 North Fiftieth Street
Chicago---2128 Old Colony Bldg.
Detroit---1514 Lafayette Building
Cleveland---2204 Rockefeller Building
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Philadelphia--1615-1700 Walnut St. Bldg.
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Ask for a free copy of our booklet, "Tanks that Stop Evaporation Losses"

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Cutting Allowable To Match Demand

Applied common sense is illustrated in the reaction of the Texas Railroad Commission to the price cut in certain Southwest Texas fields.

The price of crude from these districts was reduced because of the seasonal decline in the market for that type of crude which is used chiefly for burning oils with the largest demand in the fall and winter months.

Recognizing that the price reduction reflected this seasonal slackening in demand the Railroad Commission reduced the allowable production in those districts in keeping with the market requirements at this time.

The regulatory bodies in the various oil producing states might very well follow this sensible example, keeping close watch on the production situation. Where the output has been increasing with a threat to the market structure, in which each producing state is directly interested in the revenue from oil production and in the income derived by its citizens from oil development, the state regulatory body should promptly reduce the allowable production in line with the indicated demand.

To be most effective it should not wait from month to month to correct the allowable. If overproduction is evident on the tenth of the month it need not be allowed to continue until the thirtieth. Prompt revision will have a stronger tendency to keep supply in balance with demand.

The example of the Texas Commission comes most opportunely at the moment when there is accumulating danger of overproduction overreaching itself. While it is probable the market can handle the present average production during the season of peak demand, forethought must be given to conditions in the fall when seasonal slackening in demand must make topheavy stocks perilous to the entire industry.

Reasonable regulation of production now can be much more easily borne than a sharp setback when demand is dropping.

California Operators Must Make Choice

California operators responsible for most of the increase in crude production in recent weeks should note the effect of their action upon opinion at Washington.

Their stubborn insistence on producing as they please regardless of the co-operation of 95 per cent of their fellow operators, and the fact that there is no state regulatory body in California to restrain them, is being seized as an argument for a Federal oil control law that will force regulation on states which fail to regulate their production.

The prolongation of the session of Congress continues the possibility of congressional action. The attitude of this California minority is being used as an excuse for control legislation that had been considered averted. It used to be Texas but Texas recognized that state regulation is the most effective protection against Federal regimentation.

The California minority also may have to make a choice.

Need Showdown on Truck Shipments

The increase in truck shipments of gasoline from the East Texas Field in June over May emphasized a situation demanding immediate attention from the Texas Railroad Commission and its staff.

It was in marked contrast to the tank car shipments which were being effectively regulated.

Truck shipments, on the contrary, seemed to continue to defy regulation. The recently enacted truck law was speedily carried into court. The volume of truck shipments, compared with 35 per cent recovery from legitimate crude, clearly indicated a large proportion of "hot" oil being run to plants in the field and shipped out in gasoline trucks throughout the eastern and central sections of the state and possibly some across the line.

The order of Chairman Thompson of the Railroad Commission sent to the State tender board directing that all available evidence be turned over to Attorney General McCraw for prosecution of all refiners and purchasers of illegal production in the East Texas field comes none too soon.

There is no question that there are sufficient laws on the statute books of Texas covering all the points that have been raised in regard to enforcement of the oil conservation regulations, given a real determination to enforce them. If the Railroad Commission has not sufficient men to do the job properly and completely provision ought to be made to that end.

At the same time it is folly for any refiner in the field selling his gasoline to major buyers at the present market to think he can continually overproduce without bringing down the price structure on his own head.

NATIONAL BANK OF TULSA

TULSA, OKLAHOMA

Statement of Condition June 29, 1935

RESOURCES

Cash and Due from Banks	$16,925,859.56	
U. S. Gov. Securities	10,598,704.80*	
Other Bonds and Securities	3,361,591.50*	
		30,886,155.86
Loans and Discounts		15,146,521.15
Overdrafts		492.35
Income Receivable Accrued		156,945.45
Stock in Federal Reserve Bank		240,000.00
Investment in Bank Premises		2,161,000.00
Customers' Liability under Acceptances		10,641.90
TOTAL		$48,601,756.71

LIABILITIES

Deposits		$40,250,985.50
Acceptances Executed		10,641.90
Income Collected not Earned		65,541.59
Interest, Taxes, etc., Accrued		77,025.57
Capital—Preferred	$ 4,000,000.00	
Capital—Common	2,000,000.00	
Surplus	2,000,000.00	
Undivided Profits and Reserves	197,562.15	8,197,562.15
TOTAL		$48,601,756.71

*Market value on June 29, 1935, of Investments was in excess of these figures.

COMPARATIVE DEPOSITS

April 25, 1933	$22,327,010.62
June 29, 1935	40,250,985.50

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Low-Cost Pipe Line Station Developed by Stanolind for Use in New Fields

By W. T. ZIEGENHAIN

Based upon the exceptionally favorable results obtained while operating a unique type of pumping station in the Fitts Pool of Oklahoma, the Stanolind Pipe Line Co. has decided to standardize on this sort of unit when entering new fields and where less than 15,000 bbls. of oil are to be handled daily.

This "semipermanent" type of station is unusually efficient, requires a low initial investment, has a high salvage value and requires less than the normal amount of money to operate. The more detailed summary of the advantages of this unit is included in tabular form elsewhere on this page.

Location in Field

The Stanolind entered Fitts early in the development of the new pool. The trend of production was not known then and the field has not yet been defined. Desiring to install a pump station that could be enlarged or moved, as future conditions warranted, a suitable location was sought. This was essential in consideration of the type of unit to be built as will be explained later.

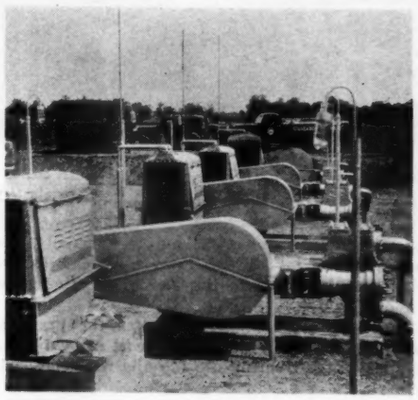
Surveys of the area were completed, elevations run and calculations made to enable the engineers of the company to arrive at an optimum balancing of gravitation against pipe line friction losses and investment. It was found advisable to locate the unit in the NE NE Section 30-2-7. By choosing this location the company was able to eliminate the use of field pumps and tanks, the oil flowing from the wells to the station suction header by gravity.

Description of Unit

Speaking of the Fitts pump station as a unit, it includes three 50-horsepower type B.t.u. Buda motors and one 100-horsepower Hercules motor, each connected to a Gaso reciprocating pump through a V-belt drive housed in a steel, weather-proof guard. Type 7 Gaso pumps are used on the smaller motors and type 710 on the larger motor. These permit the insertion of liners which will take full advantage of the available power.

Field gas is used to drive the motors and at present the fuel cost approximates $60 per month. An ample supply of cooling water is available, fresh water being drawn from a nearby creek and held in a small tank on the station site to which the water is returned from the engines. Even when operating at capacity, the four motors use less water than could be drawn from a single well point were the creek to become dry.

All of the pumping and power equipment is left out in the open, not only with the idea of relieving the station of the cost of buildings but to promote safety for the operators. In such a station, where field conditions vary almost daily and where progressively larger loads are placed on the station as new wells are brought in, it is not possible to anticipate all of the things that can happen. If a pump gasket fails, a line breaks or an oil leak develops there is no chance for gaseous vapor to accumulate and possibly envelop the operator in fire. Also, after the defect is noticed it is easier for the operator to shut down that particular unit, quickly. At the present time one of the two buildings shown in the picture here, is used as a control house and the other is used for temporary storage for field supplies. It was explained earlier that by reason of its suitable location, the station is supplied with oil which flows by gravity directly from the vapor tight lease tanks to the pump header. A dual gathering system has been installed, one to take oil from wells located on a relatively high elevation and the other takes the oil from wells which are located on relatively low ground. The two systems join and by using a differential pressure type flow meter at the station, the operator is able to determine whether his pumps are taking the oil as fast as the wells are producing. If the back pressure has a tendency to build up, he speeds up his pumps, and if there is a tendency for the back pressure to decline, he retards them.



The pump is connected to the power unit in each case through a V-belt housed within a metal, all-weather guard

His control is augmented by a combination pressure-vacuum gauge on the gravity line on the suction side of the pump so that control is positive and immediate.

At the present time, the four pumps are handling from 14,000 to 16,000 bbls. of 39 gravity oil daily. They operate against a discharge pressure of 600 pounds and transport the oil 42 miles to the company's station at Pauls Valley. To date, the station has pumped approximately 2,000,000 bbls. of oil and has operated less than eight months. Originally it consisted of two 50-horsepower engines and has operated in its present form for less than three months.

The company expects to build a permanent type of pump station on or near the site of the present plant and plans call for the installation of two 300-horsepower engines driving centrifugal pumps through step-up gears, each unit to handle 30,000 bbls. of oil per day at 350 pounds line pressure or 30,000 bbls. per day together operating in series against a line pressure of 700 pounds. The present units will be retained in place as stand-bys.

New Pipe Line

An 8-inch line will be laid from the new station to the company's station at Byng where it will connect with a 6-inch line running to Maud. This will permit the company to deliver oil from the Fitts Field to the Tribbey station on the trunk line or to the Earlsboro trunk line connection through Maud.

The new line will be electrically welded, the pipe being reclaimed from an idle, screwed-joint line laid from the Deaner Pool to Drumright. At the present time the pipe is being taken up, cleaned, sorted and the ends are being cut off for welding together in the field.

A 20,000-bbl. steel tank will also be erected as part of the new station. This will operate as a surge tank for the pumps and will be hooked into the lines from the field lease tanks in such a way as to take oil from the line at any time the back pressure on the pump suction exceeds 15 pounds and will feed into the pump suction header when the pressure approaches zero. A liquid level gauge in the control house will show whether the tank is being filled or emptied as a guide for the operator in controlling pumping rates. By handling the oil in this manner there will be practically no

Advantages of Fitts-Type "Semipermanent" Pump Station Developed by Stanolind

Low Initial Investment	Initial Cost is about two-thirds that needed to build a permanent station of same capacity.
Low Evaporation Loss	By eliminating station measuring tanks and field pumps, oil is brought under pipe line pressure soon after being brought to the surface and evaporation losses are negligible.
Low Operating Cost	Requires but one operator per shift.
Safe to Operate	Gas cannot accumulate as vapors are quickly dissipated in the air.
Compact and Unitized	Complete station requires less than 10 acres of ground.
Low Cost of Fuel	Field fuel expense averages $60 per month when station is operating at capacity.
High Salvage Value	All but $200 worth of concrete foundations may be moved if the station is moved.
Clean Site Is Left	When station is abandoned and equipment moved no great expense is involved in grading and filling in.

evaporation losses to take place from the time the fresh oil is withdrawn from the lease tanks until it is delivered at the terminal on the pipe line. The oil is under a hydrostatic pressure as it leaves the lease tanks to enter the gravity lines and from here on the system is closed, the new 20,000-bbl. tank operating as a surge tank and held under a slight pressure at all times.

Installation of the 20,000-bbl. tank has been started, the laying of the 8-inch pipe line will start within two weeks and the building of a new, permanent pump station will probably not be started for several months or until full details are worked out in regard to its design.

Gas from Bottom of Gulf Kills Thousands of Fish

HOUSTON, Tex., July 8.—Choking clouds of sulphuric gases which have been blown in from the Gulf of Mexico along the Padre and Mustang Islands coasts of the lower Texas Gulf Coast below Corpus Christi the past week, and which are believed responsible for the killing of thousands of tons of fish cast upon the beaches, are being attributed to the escape of gas from some pocket or entrapment under the bottom of the Gulf off the shore of those islands.

Clyde T. Reed, instructor in charge of the Texas A. and M. marine biology laboratory at La Quinta, has been making a study of phenomena with a view to determining the source of the gas which killed the fish. He stated he believed that some volcanic action had caused a rift in the bottom of the Gulf, opening a sulphur dioxide gas pocket, and that this gas blowing up through the water had killed the fish.

Most all the fish were killed before being washed upon the beaches and, judging from their open mouths, all died as if gasping. The gases were evident for 50 miles along the coast.

Mirando Crude Bottoms Help Color of Gulf Coast Lubs

HOUSTON, Tex., July 8.—While many lub oil manufacturers long have been experimenting with natural coloring for green cast oils, some Gulf Coast refiners for some time have been producing such oils without the use of chemical dyes. The system makes use of cycle fuel oil as the medium of colorization, and is simple and continuous with the regular operations of treating and agitation of overhead stock.

One refiner on the Gulf Coast, who had been experimenting with several grades of dyes for coloring oils, came upon the idea of using cycle fuel oil by chance, and since has worked out a formula for practical use of fuel oil for such purposes. Cycle fuel oil, a by-product of the cracking units, after having been run through the tar stripping system, offers a permanent source of supply, and its use eliminates the need for chemical dyes, a sizeable item of cost in the manufacture of green cast oils.

This particular plant illustrates the practical use of the formula as the initial cost of equipment installation for treating the lub oils with the cycle fuel oil was only $500, and since the installation there has been no other cost except operation.

Rear view showing three of the four units which pump from 14,000 to 16,000 bbls. of oil from the Fitts Pool daily to another station 42 miles away

The cycle fuel is taken directly from the tar stripper, shown at left, into a 500-bbl. run-down tank at extreme right, from which small percentages are pumped into the agitators in the foreground to be blended with the overhead lub stock

The only equipment installed for the process consisted of one 500-bbl. tank equipped with steam coils, a small pipe line connecting the tank directly with the tar stripper, and a 2½-inch line from the tank to the agitators. At the agitators is a flow meter which controls the percentages of fuel oil used. The percentages vary from 1 to 4 per cent, depending on the viscosities of the overhead stock, on a 2,000-bbl. batch. The cycle fuel and the overhead stock are treated as in conventional operations.

The cycle fuel used in this operation is the residue of a blended charging stock of Mirando crude and gas oil in cracking still operation. An average blend is 60 per cent gas oil and 40 per cent crude. The laboratory inspection on this crude follows:

INSPECTION OF TOPPED MIRANDO CRUDE

Gravity	22.1
Flash, °F.	290
Fire, °F.	310
Vis. at 100, sec.	54
Cold test, °F.	—0
B.s. and w.	trace
Sulphur, per cent	0.29
Carbon residue, per cent	0.24
Tar, per cent	4.0

ENGLER DISTILLATION OF TOPPED MIRANDO CRUDE

I.B.P.	412
5 per cent	446
10 per cent	469
20 per cent	484
30 per cent	506
40 per cent	532
50 per cent	558
60 per cent	592

ESTIMATED YIELDS FROM MIRANDO CRUDE MAKING 200, 300, 500, AND 900 VIS. LUBS

Produced—	Yields, per cent
Gas oil	54
200 vis. lub	23
500 vis. lub	7
900 vis. lub	5
Fuel oil	6
Loss	5
	100

Viscosities at various temperatures:

Grade—	200	300	500	750	1200
Vis. at 40° F.	2,535	4,730	14,200	32,500	....
Vis. at 70° F.	475	1,035	2,045	3,460	6,350
Vis. at 100° F.	214	315	520	765	1,335
Vis. at 130° F.	101	132	193	263	373
Vis. at 170° F.	57	65	83	95	123
Vis. at 210° F.	43	46	51	56	65
Pour, °F.	—10	—5	0	5	15
Sulphur, per cent	.35	.59	.48	.49	.54
Ash, per cent	.005	.005	.009	.007	.001
Demulsibility	*200	*155	†140	†140	†155

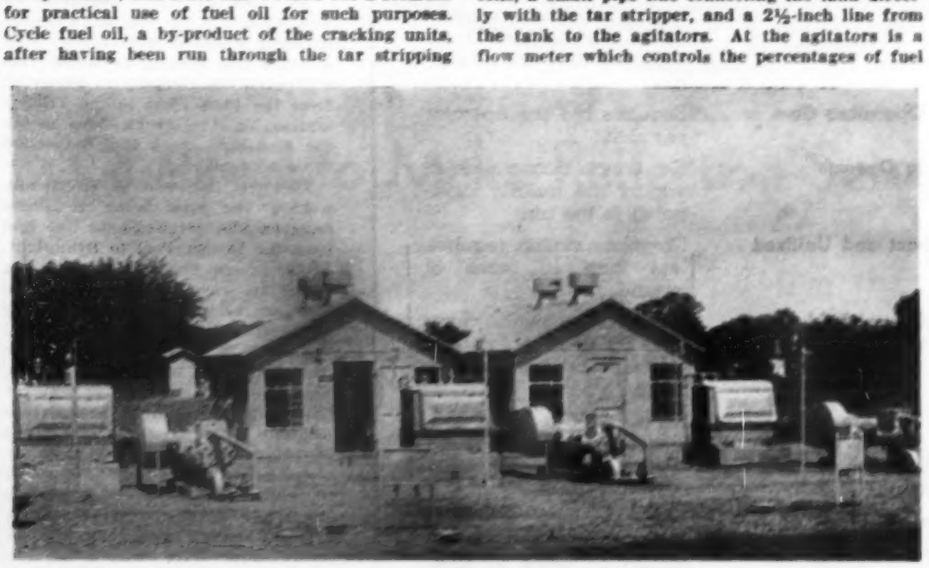
*At 130° F.; †at 180° F.

Possibly the best blends for this grade of stock for competitive markets are:

10 S.A.E.—	
200 viscosity E bright stock	21%
500 viscosity green cast	71%
40 S.A.E.—	
200 viscosity E bright stock	20%
500 viscosity green cast	10%
750 viscosity green cast	70%
60 S.A.E.—	
150 viscosity D bright stock	68%
1200 viscosity green cast	32%

COLOR AND COMPLETE TEST DATA ON MIRANDO LUBRICANTS

S.A.E. No.	10	20	30	40	50	60
Blend:	200	90-200 10-500	85-500 15-1200	30-500 60-1200	75-1200 25-D.B.	35-1200 65-D.B.
Gravity	29.2	28.2	27.4	26.5	26.4	25.9
Flash °F.	340	360	370	445	410	430
Fire °F.	375	405	415	495	460	475
Vis@100° F.	213	301	579	1049	1579	2135
Vis@130° F.	97	140	253	333	490	750
Vis@210° F.	43	47	53	59	75	105
Cold test	—0	—0	—0	5	5	10
Color	5	5	5	5	6+	7+
Conradson Carbon %	.07	.10	.12	.13	.13	1.40
Ash	.004	.003	.003	.004	.003	.005
Acidity	.056	.004	.056	.004	.056	.008



General view of Stanolind Pipe Line Co. station in the Fitts, Oklahoma, pool. The buildings in the background are used for housing only the controls and storage. A 20,000 barrel tank is being erected in back of the building to the right as the first step toward the erection of a larger and permanent station

DUBBSCRACKING is *the* way to make good gasoline, no matter what kind of oil you have to crack—or how many kinds

Employing the Chemical Cop is *the* way to keep the gum all out of your cracked gasoline and the anti-knock value all in He saves treating costs and he saves gasoline

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
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OPERATING IDEAS

Device For Mixing Mud

Mixing muds for a rotary drilled well is now a science. Exact proportions of admixtures and mud are prepared for different conditions in the hole. To accomplish this mixing with minimum of effort and maximum of accuracy there have been inverted pyramids of sheet metal made and attached directly to the flow line through which the water under high velocity is pumped. The mixture accumulates in the reserve pit and is available to the driller as needed. A mixing device of this type is shown in the accompanying cut.

Jet For Cuttings

Cuttings from formations penetrated by rotary drilled wells are dropped out of the mud stream by conducting the mud returns from the well through wide and deep ditches. In time these ditches fill with cuttings and it is necessary to remove them to storage pits. The practice has been developed to accomplish this removal of cuttings by inserting in the ditch a length of pipe, such as shown in the accompanying cut, and jetting the material out of the pit by use of high pressure steam conducted to the lower end of the discharge pipe. The velocity of this escaping steam causes the cuttings, with some mud, to flow out of the ditch in which it has been accumulated and discharge into reserve pit.

Gas Engine Muffler

Where gas engines are located near homes it is desirable to deaden the exhaust noise, and many ingenious devices have been made for this purpose during the past few years.

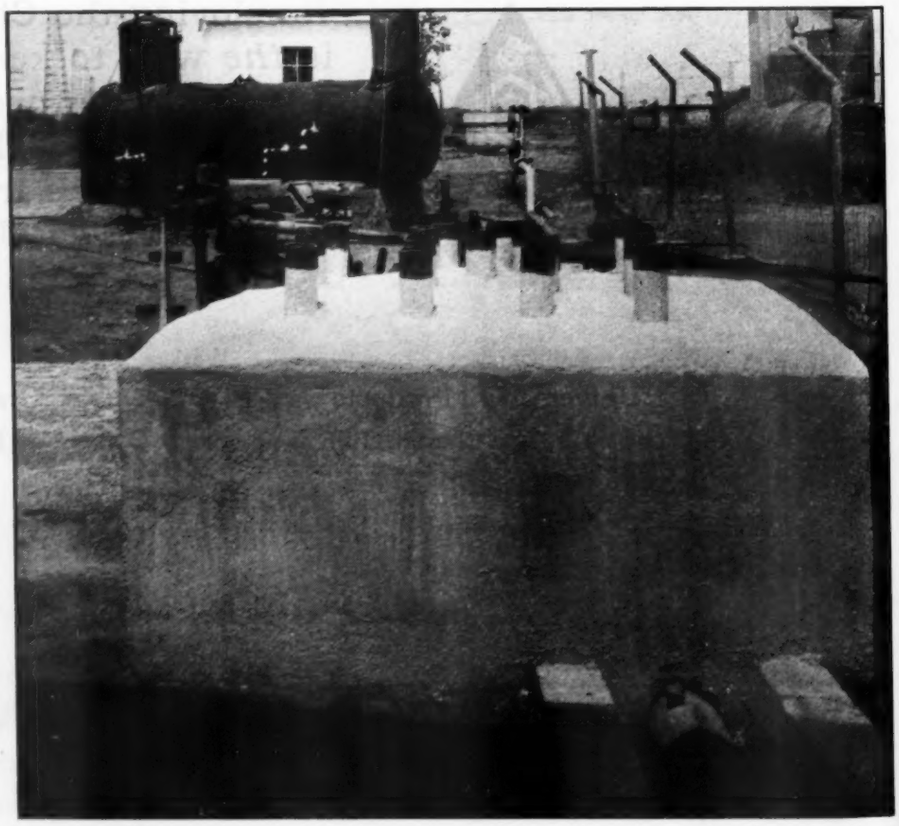
The accompanying cut shows a home-made muffler installed in Seminole, Okla., consisting of a 2-foot hollow cement block in which are imbedded a number of short pieces of 2-inch pipe. The total cross section of these 2-inch pipes exceeds the cross section of the exhaust pipe from the engine and by reducing velocity of the spent gas by permitting escape through these short pipes the noise of the exhaust has been calculated as being about 80 per cent.

Hose Used For Gas Line

Often there was plenty of the required kind of hose handy, and if there wasn't it was a simple matter to get it; but nobody had thought of using it that way.

It has become a common practice in many fields for oil companies to operate a pulling machine by means of a power unit mounted on a truck bed. The fuel for the power unit is natural gas obtained from the same well that is being serviced, or from a nearby well. A good deal of work and time are involved in hooking up a gas line before the job of pulling the well can be started.

Employes of one large company operating in the Oklahoma City Field had a bright idea. Why not use heavy-duty rubber hose as a fuel line? They tried it. It worked so well that other operators in the field are adopting this time and labor-saving device.



Butane Gas, Normally Waste Product, Successfully Used as Engine Fuel

By L. G. E. BIGNELL

In Coal County, Oklahoma, a wildcat well is making history. The test is important for it is in an undeveloped territory about 35 miles southeast of the Fitts Pool, but this story will not deal with the results. That story is to follow for the hole is now only about 3,000 feet deep and the pay is not expected above 5,500 feet.

This story has to do with the kind of fuel used in the internal combustion engines. The fuel

Truck tank used in hauling butane from the plant to the well

used is not new but this is the first application to a deep well in the Mid-Continent region.

The fuel is a mixture of butane and isobutane containing some propane and therefore not commercial grade butane. Normally pure butane boils at 32.9° F. One gallon weighs 4.85 pounds and will produce 31.6 feet of gas under standard temperature and pressure and contains 3,274 b.t.u. per cubic foot. The vapor pressure is 52.2 pounds absolute, per square inch at 100° F. Due to the presence of some isobutane this product has a slightly lower boiling point and a little higher vapor pressure than pure, normal butane.

This butane is a by-product of casinghead gasoline manufacture and a large part would normally be wasted into the tail gas from the gasoline plant if not used in this way.

Due to the greater demand for low vapor pressure casinghead gasoline in the summer months this butane is obtained in conjunction with the manufacture of 14-pound vapor pressure gasoline instead of regular 26-pound product. If the original 26-pound liquid represents 100 per cent, the next step restabilizes about 67 per cent of this product to 14-pound gasoline and about 33 per cent of the original liquid is recovered as butane.

This liquified gas is stored in an 8,000 gallon horizontal tank set about 100 yards from the derrick after being hauled in a special tank truck from the casinghead gasoline plant where manufactured. The pressure held on the tanks on the truck varies from 75 pounds immediately after loading to about 45 pounds when it reaches destination. The storage tank pressure varies from 24 to 35 pounds per square inch.

This storage tank is under a wooden roof to keep the sun's rays from beating directly upon it. It is also painted aluminum. There is a visible gauge glass on the back end of the tank equipped with a petcock at the lower end.

If this petcock is opened and some of the liquid caught in the cupped hand it immediately begins to boil when exposed to the air and in a few moments all disappears. While evaporating there is a peculiar cooling sensation felt in the holder's hand and after it has evaporated the skin feels like it had been covered with a thin coat of wax for a few moments. It has no harmful effect.

Butane is a gas under natural conditions. It is extracted from casinghead gas and must be handled under pressures indicated above until ready for use when it is again converted into a gas. This is done by lowering pressure to about atmosphere by passing the liquid through regulators.

Cooling Effect

Under the derrick floor between two of the concrete foundation piers there are a number of fittings and regulators with pipe connections. Between the storage tank and the rig there is a 2-inch pipe laid underground. At the rig the the liquid first passes through a regulator that reduces the pressure from 35 to about 10 pounds.

This reduction in pressure creates cooling and to handle the cooled liquid a copper tube coil is used and the fuel delivered into a heat exchanger. This heat exchanger transfers heat from the hot water from the engines to this gas and at the same time the cooling water for the engines is lowered in temperature before it is returned to the system.

After heating in the exchanger the fuel now in a gas stage is passed through a second regulator and reduced in pressure from 10 pounds to a few ounces. At the low pressure it expands into a gas and is then delivered into a small tank near the engines from which the gas for engine fuel is withdrawn as needed.

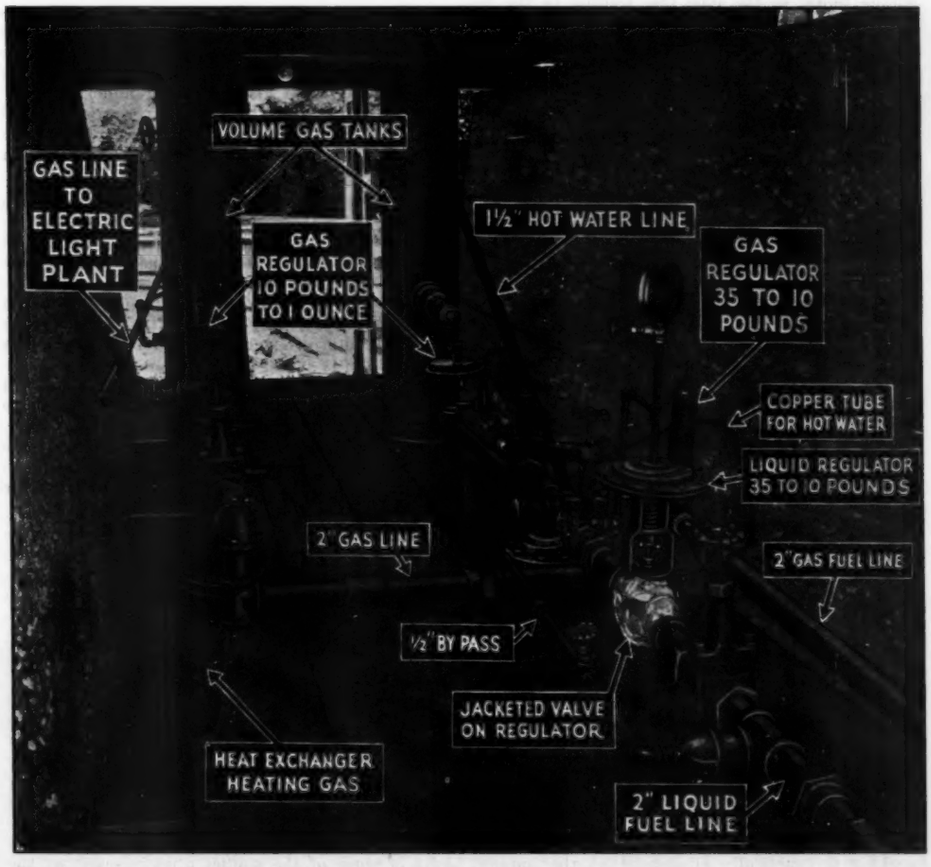
An ingenuous device is installed on the volume tank. The differential float of a 100-inch orifice meter was changed from metal to cork and water is used in place of mercury. On the upstream side it is connected into the volume tank. By the use of this device a meter with a total range from four ounces to as low as one ounce pressure can be satisfactorily read. It is desireable to have some kind of recording device in this flow line as best operating conditions are secured only at low pressures.

Operating Conditions

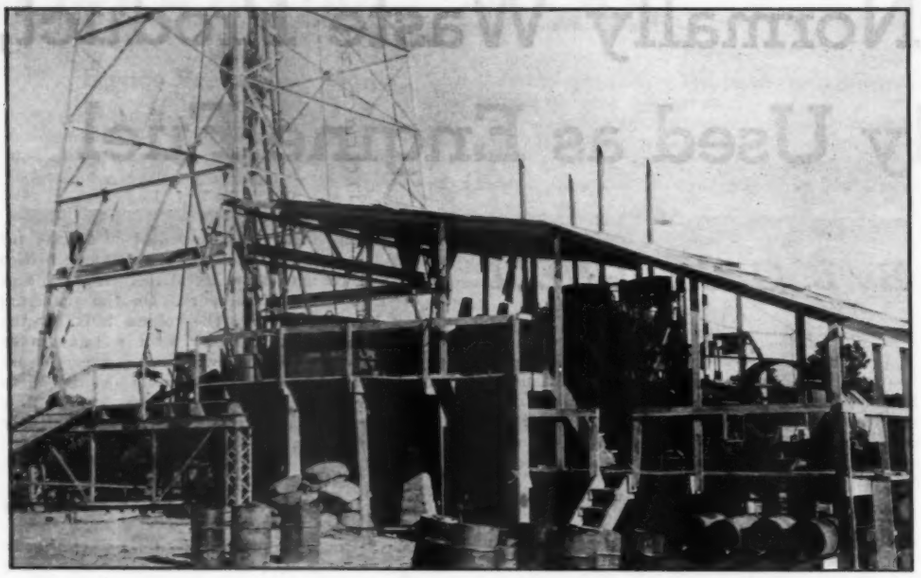
When it was decided to drill this well it was found that electric power lines ran close to the property. Invesigation developed the fact that if this well were hooked onto this system there would probably be a surging in the line affecting other users and it was therefore decided the utility company could not furnish power conveniently.

Diesel fuel was next considered and it could have been secured without difficulty, but the company in charge of this drilling operation used butane fuel in Devils Den, California, and having this type fuel available it was selected.

To transport the liquid butane from gasoline plant to well was the next problem. Tank wagon was decided upon and two 42-inch diameter by 92-inch long horizontal tanks were mounted upon a truck body. These two tanks are connected across the top with a smaller third tank which acts as the dome upon a tank car leaving room for expansion while fuel is in transit. The entire battery of tanks was tested to 150 pounds hydrostatic pressure. The tanks are gauged by the use of a small sliding tube with a petcock on


VOLUME GAS TANKS
GAS LINE TO ELECTRIC LIGHT PLANT
GAS REGULATOR 10 POUNDS TO 1 OUNCE
1½" HOT WATER LINE
GAS REGULATOR 35 TO 10 POUNDS
COPPER TUBE FOR HOT WATER
LIQUID REGULATOR 35 TO 10 POUNDS
2" GAS LINE
2" GAS FUEL LINE
½" BY PASS
JACKETED VALVE ON REGULATOR
HEAT EXCHANGER HEATING GAS
2" LIQUID FUEL LINE

Hook-up of regulators and fittings under derrick floor for the use of butane gas in internal combustion engines on drilling well



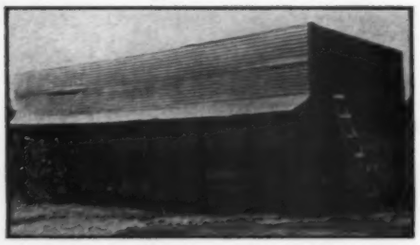
Rig equipped with two 300-horsepower internal combustion engines using butane for fuel

the top. This tube is graduated in inches and lowered through a stuffing box. The capacity of the tanks is 1,080 gallons. When desired a full or semitrailer with tanks of similar capacity can be added. A pump, driven by the engine of the truck, is used for unloading the liquid into the storage tank at the rig.

This large tank is 7 feet in diameter and 30 feet long. A 100-foot pipe line extends from the truck and connects into the bottom of the tank at one end for filling. The tank wagon does not have to stand close to the storage tank or rig when unloading.

At the opposite end of the tank a combination connection is made to both the top and bottom. The top connection delivers gas used in starting the engines and the bottom connection delivers the butane liquid to the pipe line leading to the reducing pressure mechanism.

The reducing valves at the rig are water jacketed to prevent freezing. The balance of the system is described above. When the gas is delivered to the engine it ranges in temperature from 100 to 120° F. The pressure maintained on the gas is from 1 to 1½ ounces to insure smooth operation of the engines.



8,000-gallon butane fuel storage tank situated near the rig

Two 300-horsepower, 6-cylinder internal combustion engines are used. They were formerly operated with natural gas. No special adjustments for either air or timing were found necessary in operating them with this hotter butane gas fuel. In addition to the two large engines there is a small power plant and a water station using this fuel.

Economy

This well has been drilling about two weeks and 38 gallons of liquid butane has been used hourly, equal to .062 gallon per brake horsepower hour. Up to this time the engines have not been under full load. No mechanical difficulties have been experienced using this fuel. Butane gas does not dilute lubricating oil, and detonation and knocking is practically eliminated as the butane gas has high octane number.

This fuel is being used at Amerada Petroleum Corp.-Stanolind Oil & Gas Co.'s No. 1 Travelers Insurance test in the SW NW SE Section 28, Township 1s, and Range 9e. Creekmore Drilling Co. of Tulsa and Ada, Okla., is the contractor.

Down Under in Illinois Area in Relation to Oil and Gas

Dr. M. M. Leighton, chief of the Illinois State Geological Survey, gave an illustrated address on the subject "Down Under in Illinois in Relation to Oil and Gas," before the Illinois-Indiana Petroleum Conference at Robinson, Ill. He described the conditions under which the sedimentary rocks of the state were deposited, from pre-Cambrian time up to the present, illustrated by photographs and by maps showing the areas of outcrop of rocks of the various geologic systems and series which underlie Illinois. He then described the geologic framework of the state and showed a series of maps of the areal distribution of underlying formations after each successive layer was stripped off, first the Pleistocene, then the Pennsylvanian or "Coal Measures," then the Chester series, then the Mississippian.

The structural features of the state were then discussed in relation to their influence on the accumulation of oil and gas. The principal structural features are the LaSalle anticline and the great basin area to the west and southwest of it. The southeastern Illinois oil field, which is located on the LaSalle anticline, ranks fifth in the United States in total production to date. The basin area to the west is largely untested and owing to the scarcity of outcrops and of wells, the detailed structure is unknown in most of this area. Like the Michigan basin, this basin may have important accumulations of oil on locally favorable structures. Geophysical investigations will be needed to supplement geologic studies in exploring for such structures.

Doctor Leighton emphasized the need for the preservation of complete and accurate information from new wells, including sample drill cuttings for geologic study. It is largely from such studies that the stratigraphic and structural problems of the state and particularly of the basin area must be worked out.

In connection with use of improved recovery methods in producing fields, detailed information on the reservoir rocks is needed. For obtaining cores of these rocks the survey possesses a Baker cable tool core barrel which is available for use by operators at selected new wells. Laboratory tests of samples from these cores are made for porosity, saturation, and permeability.

Doctor Leighton presented in summary the results of some of the studies already made by the state geological survey of air and gas repressuring, water flooding, demulsification of oil and mentioned plans for an investigation of problems of acid treatment.

With its laboratories and its staff of specialists in geology, physics, chemistry and mineral economics, the survey is in a position to undertake many problems of the petroleum industry related to improved recovery methods and exploration for new fields.

Future Role of Stripper Well in Relation to Oil Supply

By DR. W. H. VOSKUIL

Mineral Economist, Illinois State Geological Survey*

The record of gasoline consumption in 1934 and the indicated trend of consumption in 1935 point to these years as topping all previous records of gasoline consumption and, in future years, this is not expected to decrease. The oil industry is, therefore, charged with the responsibility of finding each year a sufficient quantity of raw material from which approximately 375,000,000 bbls. of motor fuel can be obtained. In spite of the existence of excessive potential current supply, the discovery experience of new pools since 1931 has not been very encouraging. In the period, 1931 to 1934, annual consumption was 870,000,000 bbls. while annual discoveries averaged 580,000,000 bbls. Consumption has been 50 per cent ahead of new discoveries and an adequate motor fuel supply came in large measure from the prolific discoveries in the previous five-year period of 1926-1930. Unless discoveries can again be made to equal annual demand, a period of oil shortage will ensue.

Six methods have been suggested to augment the supply of motor fuel. They are:

1. Increased recovery from old fields.
2. Increased percentage of recovery of gasoline from crude oil, by cracking or by hydrogenation.
3. Imports.
4. Liquefaction of coal.
5. Oil shale.
6. Alcohol from organic sources.

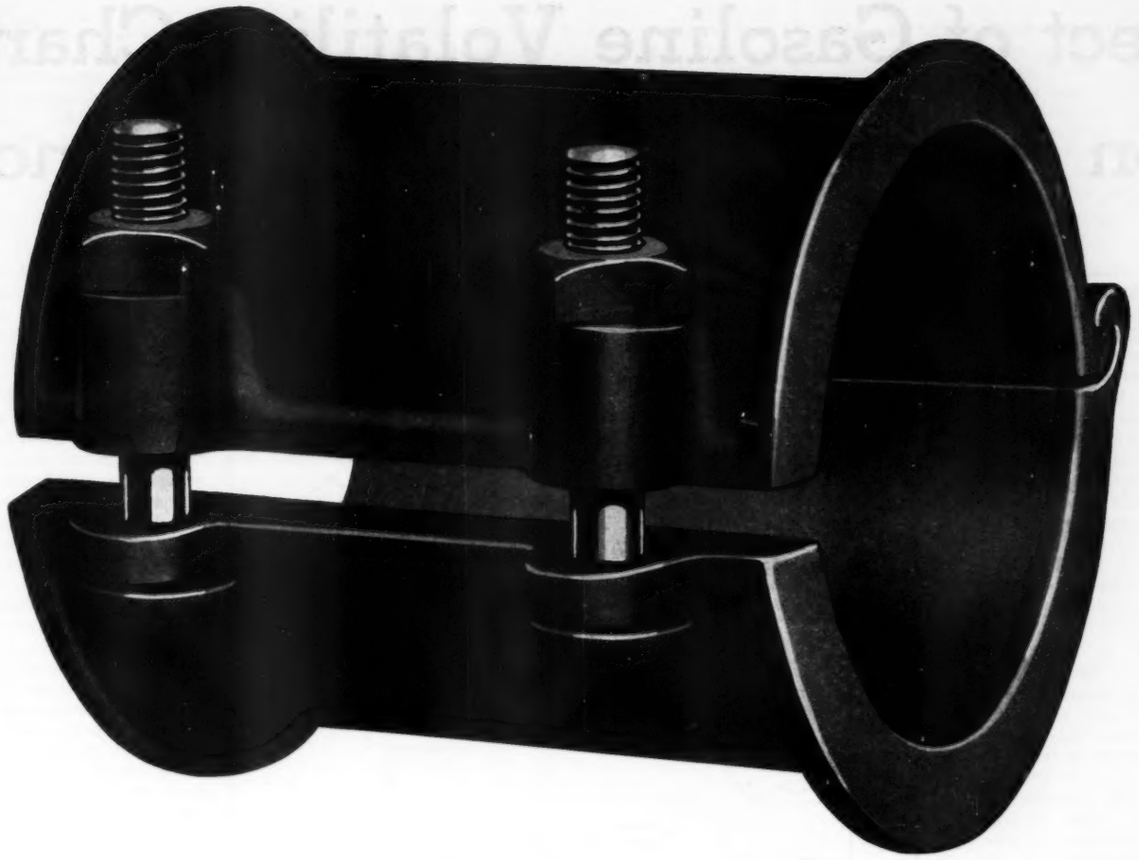
Under existing conditions the last three need not be considered. Importation of oil has been curtailed in recent years to protect the domestic industry. Further cracking and hydrogenation offer possibilities of augmenting the supply of motor fuel from a barrel of crude oil but at some increase in cost of refined product.

The stripper well areas of the oil-producing states offer possibilities of augmenting the sources of motor fuel supply that have not been fully utilized. The importance of the stripper fields cannot be judged entirely from their annual contribution to the crude oil supply; the duration of production from the stripper well areas as compared with the spectacular but sometimes short-lived flush pools is also a factor to be noted. Finally, the decreasing rate at which flush pools are being discovered and brought into production will gradually bring about a lower percentage of the annual supply from this type of pool and increase proportionally the supply from smaller pools.

In view of the public and official attitude on conservation and utmost recovery of petroleum from known sources, the soundest program of conservation with respect to wells in the stripper class is to remove all production restrictions.

The hope of greater ultimate recovery in the stripper well districts, whether they be located in Illinois, Pennsylvania, Kansas or elsewhere, lies in increasing the flow by improved recovery methods. But there can be no incentive for investment in improved recovery methods unless two conditions are met: (1) Investment in these methods must reduce the per barrel lifting cost, or conversely, must yield an additional quantity of oil which is greater in value than these added investment costs; (2) the benefits of increased recovery must not be nullified by artificially imposed restrictions. In addition to the normal handicaps of higher production costs, the stripper wells have just passed through a period of unusually severe price drops occasioned by the sudden appearance of several large fields and intensified by the general fall in price levels since 1929.

*Before Illinois-Indiana Petroleum Conference, Robinson, Ill.



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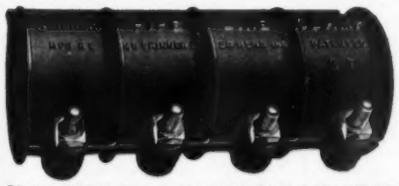
A Typical Emergency Pipe Clamp repair.



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Effect of Gasoline Volatility Changes on Automobile Road Performance

By

JOHN O. EISINGER

and D. P. BARNARD

Standard Oil Co. (Indiana)*

It is well recognized that the physical and chemical characteristics of gasolines have varied markedly since the advent of the automobile. These variations, until recently, have been dictated by economic conditions rather than by the automobile engine. The extent of these variations can be appreciated by an inspection of Figure 1, which traces the trends of the more important volatility factors.[1] Some of the important developments influencing these variations are also indicated. Complete distillation curves of fuels representative of some of the more important periods[2] are given in Figure 2. The values given in Figures 1 and 2 from 1920 to date are "normal" or "average" based on a considerable number of samples of different brands of "regular" gasolines.

The following investigation was undertaken to determine some of the possible differences in automobile performance which may be realized through the medium of fuel volatility changes. The point of principal interest lay in the relation between such volatility changes as might be indicated by variations in the A.S.T.M. 90 per cent point, per cent off at 158° F., etc., and the engine performance resulting when corresponding intake manifold and carburetor modifications were made. The bulk of the work described was done on the road with a single car, and the manifold changes, which consisted principally of temperature changes, were carried out in the simplest manner possible. They do not necessarily represent "best power" conditions but rather consist in temperature and mixture ratio alterations applied to a single existing (and standard) manifold. Vapor lock, starting, dilution effects, etc., were not considered as being within the scope of the investigation.

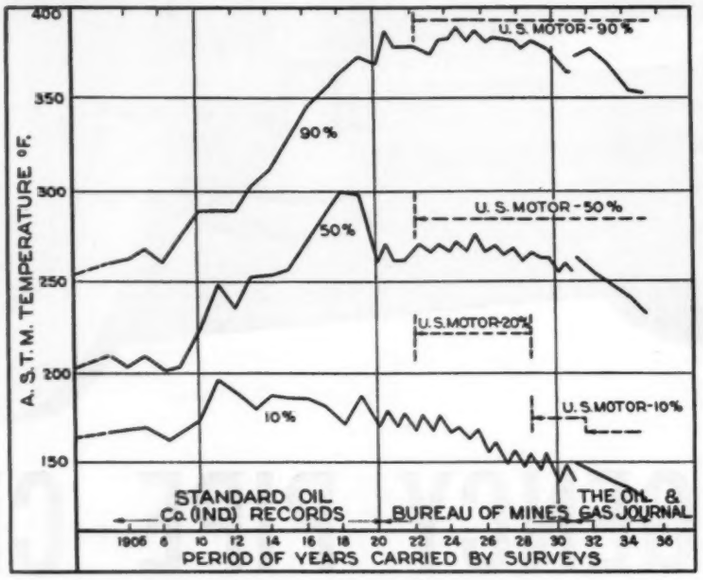

Fig. 1.—Trend of motor fuel quality over 30-year period

Experimental Procedure

(a) Method of Test.

It was decided that results of direct applicability to automobiles in service would be preferable to those which might be obtained in the laboratory. Accordingly virtually all of the work was done on the road with a (then current) 1931 model Buick 7-passenger sedan, care being taken to keep all car factors such as weight, rolling resistance, etc., as constant as possible. The more important points of the work have been verified upon certain other and more recent car models, but as the results obtained were relatively similar, the data obtained with the 1931 car only are reported here. In addition, this car was particularly well adapted to work demanding manifold temperatures controllable over a wide range. The general principle followed in this investigation consisted in first determining the effect of manifold temperature on car performance, and then setting the manifold temperature at some pre-selected value and determining the best acceleration performance possible at that temperature with each fuel. The knock rating of the fuels was raised to a value high enough (75 octane number) to preclude the possibility of detonation effects. The actual tests consisted in observing the time required to accelerate from 10 to 38 miles per hour up the uniform 5.5 per cent grade shown in Figure 3. The reason for using the grade is based on the fact that small differences in B.H.P. of the engine will show up as comparatively large percentage differences in reserve power, which are inversely proportional to the time required to accelerate from one speed to another. This relatively large percentage increase in power available for acceleration for a given improvement in engine output can be appreciated by an inspection of Figures 4 and 5. When Figure 4 is compared to Figure 5, which shows respectively the magnitude of the reserve power when accelerating on the level road and the test hill, it is rather obvious that a given difference in engine output will be magnified by hill tests. Thus, a 5.0 per cent increase in B.H.P. of the engine at 24 miles per hour (the average speed during these tests) will show up as a 5.4 per cent increase in the reserve power on a level road, and an 8.4 per cent increase on the grade. The advantages of hill tests in this and similar work where it is necessary to detect small changes in B.H.P. can probably be best appreciated from an example. On the level road under normal conditions the test car could accelerate from 10 to 38 miles per hour in about 15 seconds. On the hill it required about 30 seconds to accelerate over the same speed range and a 1.0 second difference between individual observations under each set of conditions.

Several trips up and down the hill were made following the definite test schedule, before any records were taken. This was done in order to bring engine operating temperatures to normal for the conditions of test. The actual speeds of the car were de-

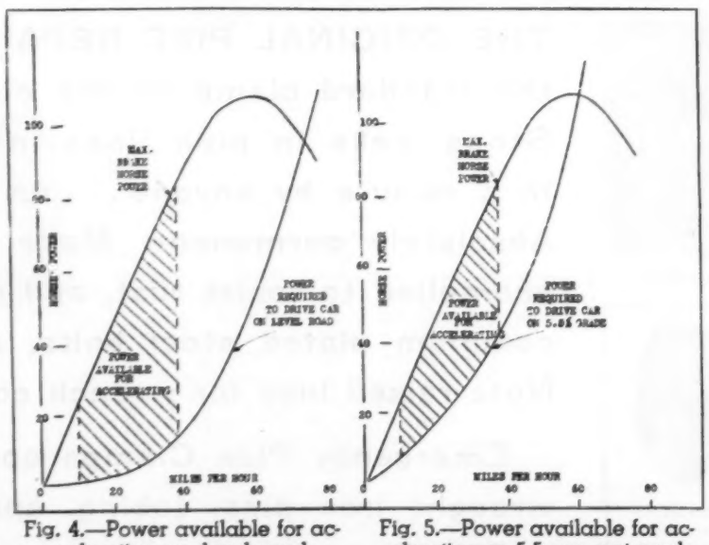
MAX. BRAKE HORSE POWER
POWER REQUIRED TO DRIVE CAR ON LEVEL ROAD
POWER AVAILABLE FOR ACCELERATING
HORSE POWER
MILES PER HOUR
0 20 40 60 80
MAX. BRAKE HORSE POWER
POWER REQUIRED TO DRIVE CAR ON 5.5% GRADE
POWER AVAILABLE FOR ACCELERATING
HORSE POWER
MILES PER HOUR
0 20 40 60 80

Fig. 4.—Power available for acceleration on level road

Fig. 5.—Power available for acceleration on 5.5 per cent grade

Fig. 3.—Test hill having 5.5 per cent grade

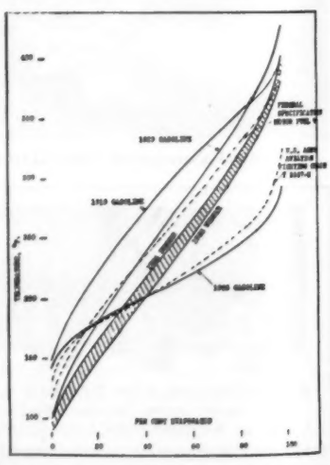

Fig. 2.—Distillations of characteristic gasolines for the period from 1905 to 1935

*Presented before S.A.E. at White Sulphure Springs, W. Va., June 16-21.

termined by a fifth wheel and suitable tachometers (Figure 6), which had been previously calibrated. Thermocouples were located at various places in the intake manifold walls as indicated in the schematic diagram shown in Figure 7. Other thermocouples were located at various places in the engine such as the crankcase sump, water

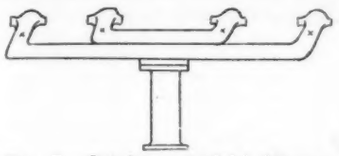

Fig. 7.—Intake manifold thermocouple locations. Thermocouple locations are marked thus, X

outlet, intake air, etc. The major part of this investigation, however, deals with intake manifold wall temperatures which were varied by controlling the amount of exhaust gases entering the hot spot, by the amount of cold air taken to the carburetor intake, etc. Manifold wall temperatures have been used instead of what are sometimes called "mixture temperatures." The latter are virtually impossible to determine accurately because of the wet bulb effect which may amount to 50 or

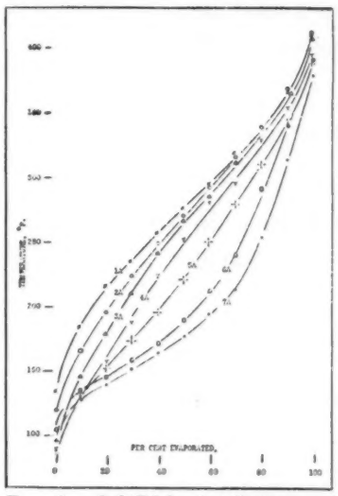

Fig. 8.—A.S.T.M. distillations of fuels in Series 1

60° F. and, therefore, may result in erratic and unreliable observations. Experience, based on observations of the temperatures of dry mixtures, indicate that under most conditions the true mixture temperature at the time it leaves the intake manifold is substantially the same as, or at least is directly related to, that of the manifold wall measured at a point 2 or 3 inches from the block.

(b) Fuels Employed.

In order to study the effects of both "front end" and "total" volatility two series of fuels were prepared. Sufficient quantities were provided to insure completion of the program without involving the necessity of duplication of any special fuel. The A.S.T.M. characteristics of the gasolines are shown in Figures 8 and 9, and Table 1. The fuels in Series 1 had substantially the same 90 per cent point, ranging from only 315° F. to 368° F., whereas the amount evaporated at 158° F. varied from 3.5 to 35.0 per cent. The fuels in Series 2 all had approximately 20 per cent evaporated at 158° F., but their 90 per cent points ranged from 376° F. to 217° F.

The average gasoline sold in the middle west during the summer of 1934 is typical of Fuel 4-A, which had 19.5 per cent evaporated at 158° F. and a 90 per cent point of 357° F. Aviation gasolines in general correspond to Fuel 6-B. Of course, there may be some fuels slightly more or less volatile than these fuels in their respective classes. U. S. motor gasolines would be in the class with the least volatile fuel used in this work such as 1-A, since a gasoline with about 8 per cent evaporated at 158° F. and a 90 per cent point of 392° F. would meet the federal specifications.

Experimental Results

There are numerous references to the improvement in horsepower output due to decreasing intake air or mixture temperature. The work of Sparrow, which was done with aviation engines shows that the indicated horsepower varies approximately inversely as the square root of the absolute temperature of the intake air. Theoretically the air density varies inversely as the absolute temperature and if it were not for other effects within the engine, the I.H.P. should vary accordingly. Gagg and Farrar[4] have pointed out the inadvisability of using such relationships for brake horsepower which, nevertheless, some people have attempted to do. Professor Roesch[5] has developed an equation based on laboratory engine tests where the brake horsepower is shown to be inversely proportional to the 0.995 power of the absolute temperature of the intake manifold or, in other words, is very closely inversely proportional to the absolute temperature. The temperature referred to in Professor Roesch's work is that of the intake manifold wall, the location of which, corresponds very closely to that used in this investigation. The work of Sparrow, of course, refers to intake air temperatures of aviation engines and it is believed that for passenger cars, where different kinds and amounts of hot spots are used, it is much more desirable to use manifold wall temperatures rather than intake air, for the obvious reason that two engines may have entirely different amounts of hot spot and one would not expect the brake or indicated horsepower to follow necessarily the intake air temperature such as it probably does, in the aviation engine. In Figure 10 are shown the results of a test in which the manifold wall temperature was varied from about 55° F. to 267° F. It should be mentioned that the higher manifold temperatures are not exaggerations since such temperatures do actually occur under normal driving conditions in summer weather. At

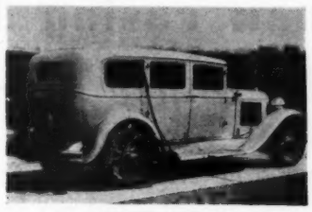

Fig. 6.—Test car

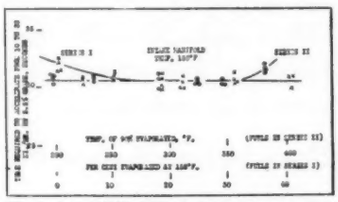

Fig. 11.—Effect of front-end and total volatility on hill climbing performance

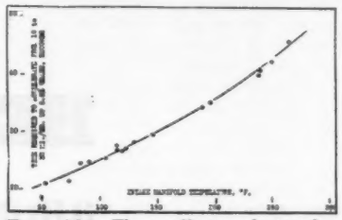

Fig. 10.—The effect of intake manifold temperature on hill climbing performance

manifold temperatures below 150° F. more volatile fuels had to be used as will be explained later. The equation best fitted to this curve would indicate a very close relation to that of Professor Roesch where the brake horsepower is approximately a 2 per cent change in horsepower (in the range of normal passenger car practice) available at the rear wheels.

The effects of volatility changes at several representative manifold temperatures are exemplified in Figures 11, 12 and 13. The total number of tests made in the course of this work was quite large and extended over quite an appreciable length of time. The above examples serve to illustrate, however, the manner in which the work was carried out. (It should be pointed out that fuels in Series 1 have been corrected to a 90 per cent point of 350° F., and fuels in Series 2 have been corrected to 20 per cent evaporated at 158° F., as the result of a preliminary analysis had indicated 1 per cent at 158° F. was equivalent to approximately 5° F. at the 90 per cent point.) In every instance operation of the engine was quite smooth and the loss in performance such as represented by a 15 per cent increase in accelerating time, would not have been particularly noticeable to the lay observer. Under conditions of very poor distribution engine operation, of course, became ragged.

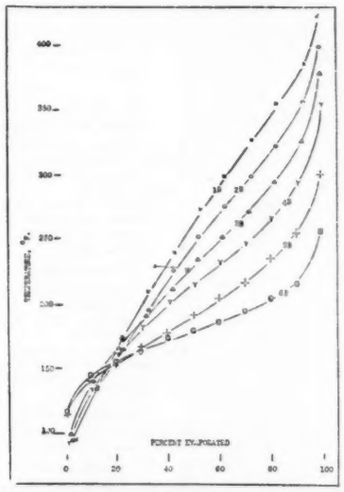

Fig. 9.—A.S.T.M. distillations of fuels in Series 2

It is obvious from an inspection of Figures 11, 12 and 13 that for each series of tests at a given manifold temperature it is possible to assure the same change in engine performance by either of two methods—by varying front-end volatility of the gasoline or by varying total volatil-

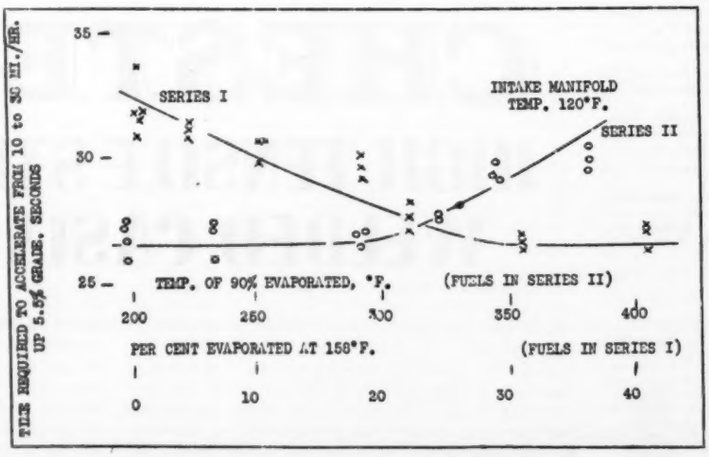

Fig. 12.—Effect of front-end and total volatility on hill climbing with intake manifold temperature 120° F.

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ity. Also the best performance at any particular manifold temperature is the same regardless of whether it is attained by providing the necessary "front-end" volatility only or by reducing the 90 per cent evaporated point. The same result may be achieved also, of course, by any intermediate combination of front end and total volatilities. In general it is felt that the data so obtained are satisfactorily consistent and that the curves so determined may be used as a reliable basis for determining the relation between "front-end" and "total" volatility insofar as they affect engine accelerating performance at equilibrium operating temperatures. These faired hill climbing curves and others not shown have been used in preparing Figure 14, which, together with Figure 10, really summarize this work quite completely.

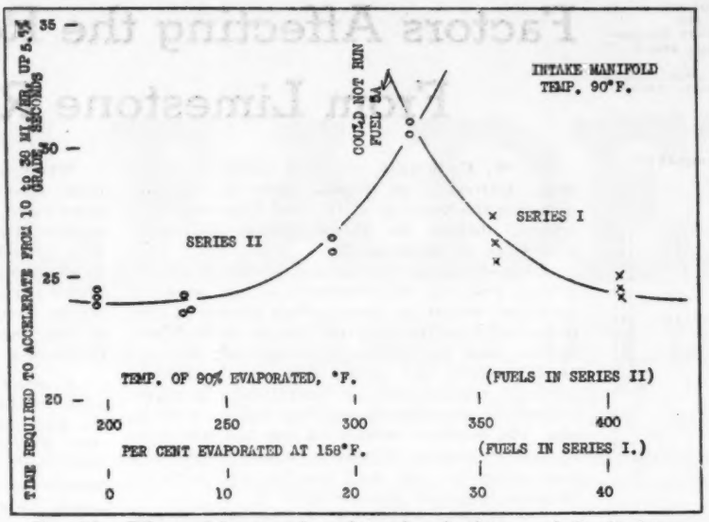

Fig. 13.—Effect of front-end and total volatility on hill climbing with intake manifold temperature 90° F.

In preparing Figure 14 a fuel having 20 per cent evaporated at 158° F. and 90 per cent evaporated at 350° F. has arbitrarily been chosen as a reference and the effects of variations in fuel volatility, either front-end or total volatilities, are expressed in terms of the performance of this particular reference fuel. Curve "A" in Figure 14 represents fuels of different volatilities and the relation between the amount which must be evaporated at 158° F. to produce the same volatility effect on acceleration performance as a given change in the 90 per cent evaporated point. It then becomes possible to establish a curve for

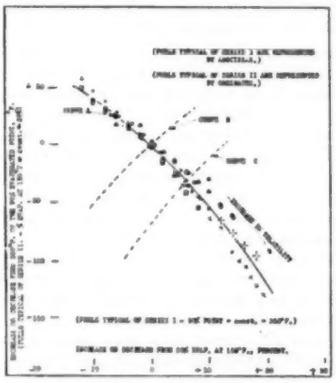
Fig. 14.—Motor fuels typical of Series 1 and 2 having similar volatility characteristics

constant volatility and car performance such as line "B". This indicates that the particular standard of engine output can be obtained with fuels having any combination of front-end and total volatilities corresponding to this curve. The practical limits to the variations so indicated would be set by starting requirements and dilution restrictions. By the same procedure a higher standard of engine performance would be attained by the use of colder manifold temperatures which would require volatilities as indicated by curve "C".

These curves indicate the fallacy in going to extremes in any one feature to obtain some particular volatility effect, as a similar result may always be obtained by a judicious compromise without incurring the difficulties which must accompany attempts to provide either very excessive front-end volatilities or very low 90 per cent points. From such data it becomes readily possible to select the best volatility combination for any new performance requirement without incurring abnormal deviations from good practice in any one feature. It is hoped that this extension of the present work may be presented in the near future. As a matter of passing interest Figures 15 and 16 show respectively the front-end and total volatility limits for different intake manifold temperatures for the test car used, the requirements in amount off at 158° F. being based on a 90 per cent point of 350° F. and those in the latter figure on the basis of 20 per cent evaporated at 158° F.

Discussion and Conclusions

In discussing the foregoing results it should be kept in mind that ordinarily if reductions can be effected in mixture temperature an increase in compression ratio may be permitted for any given octane number of motor gasolines. The effect of mixture temperature on knocking tendency is not a particularly definite relation, but in the car used in this work it appeared to be in the order of 1 octane number for each 15 or 20° F. change. This would indicate that where advantage is taken of these two effects, improved volumetric efficiency and the use of a higher compression ratio because of the lesser tendency to detonate with the colder mixtures, the brake horsepower may be increased about 15-20 per cent for a 60° F. decrease in the intake manifold or mixture temperature. If we choose to go half way and obtain a 7.5-10 per cent increase in horsepower, then the mixture temperature need only be lowered 30° F. and the compression ratio increased about 0.25 of a ratio. The anti-knock requirements of this altered engine will be substantially the same as that of the lower compression ratio engine with its hotter intake manifold. The improvement in fuel volatility required to give this improved performance would be that represented by the difference between the average summer and winter gasoline of today. If passenger cars could handle winter gasoline in summer, then there could be effected a 7.5 to 10 per cent increase in horsepower of present day engines. In other words the average winter gasoline in the Middle West is capable of developing about 7.5 to 10 per cent more power than summer gasoline if the engine design is changed to take full advantage of the properties of present winter gasoline. In any event the intake manifold should operate at about 30° F. colder in the winter than it does in the summer so as to take advantage of the difference due to volatility. It seems that considerable more attention should be directed toward preventing, during normal driving conditions, the extremely large fluctuations in the temperature of the intake manifold, particularly on the hot side. Most of us are familiar with the lack of "pep" in nearly all cars when attempting to accelerate again to a high speed after having come down to a relatively slow speed. In general with present day average gasoline the temperature of the intake manifold should never be required to operate at much above 160° F. in the summer and about 130° F. in the winter if the same low speed requirements of car performance are set up as used in this investigation. It is realized that no two people will generally agree on this latter point and therefore, the more rigid the requirements, the higher the temperature at which the intake manifold will have to operate.

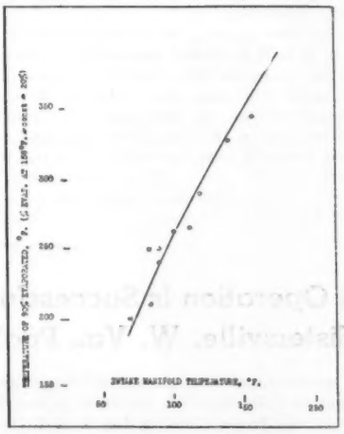
Fig. 16.—The maximum total volatility that will permit satisfactory acceleration from 10 miles per hour

The supposedly adverse effect of lower specific gravity or higher A.P.I. gravity of the more volatile fuels on gasoline mileage cannot be passed without some comment. The work by MacCoull[3] indicates that there may be some slight disadvantage under constant speed and full throttle if the carburetor is not adjusted for each change in gasoline volatility. If such gasolines are used in service with private cars it is almost impossible to detect any such effect because of numerous other more important variables. Actually some recent mileage tests of personal cars indicate that the lesser use of the choke during warming-up and the better acceleration in high gear (requiring less second gear work) results in as good, and in some cars better, gasoline mileage with the more volatile fuels, providing, of course, that volatility variations are kept properly balanced and are not permitted to go to extremes in either front end or total volatility.

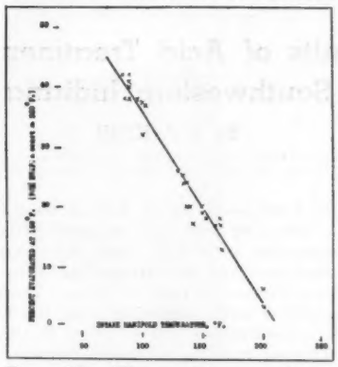
Fig. 15.—The minimum front-end volatility required to give satisfactory acceleration from 10 miles per hour

It will be noted from the foregoing that the general trend of the past four years toward improved volatility (from the manifold distribution point of view) has resulted in making available fuels of definitely increased usefulness. The practice of seasonal adjustment (intelligently applied) is adding materially to this improvement trend. It is felt that truly "weather wise" gasolines offer a very real opportunity for definite improvements in engine output.

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TABLE 1—PROPERTIES OF TEST GASOLINES

Series 1

Initial % (collected)	1-A 136°F	2-A 120°F	3-A 96°F	4-A 90°F	5-A 98°F	6-A 104°F	7-A 104°F
10	186	167	147	130	132	134	130
20	216	196	179	158	152	146	140
30	235	223	211	188	174	158	152
40	257	248	242	224	196	172	165
50	277	270	267	252	220	190	178
60	296	293	284	280	250	212	195
70	319	318	312	296	279	240	213
80	336	339	336	329	310	292	254
90	366	365	366	354	346	340	314
Max.	409	412	409	395	389	390	379
% Evap. at 158°F.	3.5	8.5	13.5	19 5	22.5	29 5	35.0
Temp. 90% evap. °F.	366	368	366	357	347	339	315
Loss, %	0.0	0 0	0.0	0 0	0 0	0.0	0.0
Resid., %	1.0	1.0	1.0	1.0	1.0	1.0	1.0
A.P.I. gravity	56.0	57 9	59.6	61.3	63.5	65 1	68.5

Series 2.

Initial % (collected)	1-B 94°F	2-B 94°F	3-B 98°F	4-B 92°F	5-B 114°F	6-B 116°F
10	136	134	140	124	140	144
20	172	164	166	160	152	154
30	208	196	192	182	166	164
40	240	226	212	202	178	172
50	272	252	234	216	192	180
60	298	274	252	232	204	187
70	326	298	270	247	216	195
80	354	322	294	267	234	204
90	396	356	326	294	254	216
Max.	423	398	378	354	300	256
% evap. at 158°F.	19 0	20.0	19 0	20.0	23.5	23.5
Temp. 90% evap., °F.	376	347	318	291	252	217
Loss, %	3 0	2.5	2.0	1.0	0.0	0.0
Residue, %	1.0	1 0	1.0	1.0	1.0	1.0
A.P.I. gravity	60 9	61.5	62 9	65.4	68 4	69.3

Results of Acid Treatment in Southwestern Indiana

By J. P. KERR

State Gas Supervisor, Indiana Division of Geology, Department of Conservation, Indianapolis*

Of the 1,000 producing oil wells in southwestern Indiana, about 12 per cent are lime wells. This lime production is largely from the "Niagaran" of the Siosi area and the "Mississippi" lime of the Pike-Gibson-Daviess Counties area. There are some scattered wells producing from the Chester lime. No consideration will be given at this time to the Trenton wells in Northeast Indiana, a few of which have been treated.

Niagaran—Of the 15 treatments in the Siosi Field, 12 may be considered as having been successful and three unsuccessful. However, one of these three responded better on its second treatment. Considering the locations of the wells treated, it appears that the outside, structurally low wells are those which were not helped. These were drilled to the second pay and an excess of water resulted from the treatment. The failure of this treatment to help one of these might be attributed to the faulty method attemped.

Mississippi Lime—In Johnson Township, Knox Couny, two wells have been treated.

In the Pike-Gibson Counties area four wells treated have resulted in increased production in three of them.

Of three wells treated in Veale Township, Daviess County, all were successful.

Two wells have been treated in Martin County, just south of Loogootee, one of which was successful and the other doubtful.

This review shows that in the majority of wells treated with acid the results warranted the expense. It is difficult to say why it did not help all the wells. Faulty application of the acid might be partially responsible or more likely it was lack of information about thickness and exact location of the saturated lime, solubility of the lime and existing water conditions.

With increased drilling in lime producting areas and deepening of depleted sand wells to lime horizons, it is likely that use of acid on suitable wells will increase the amount of oil recoverable.

*Before Illinois-Indiana Petroleum Conference, Robinson, Ill.

Factors Affecting the Recovery of Oil From Limestone Reservoirs

Dr. W. V. Howard, associate professor of geology, University of Illinois, spoke on "Factors Affecting the Recovery of Oil from Limestone Reservoirs," before the Illinois-Indiana Petroleum Conference at Robinson, Ill.

In producing oil two groups of factors are involved, first the characteristics of the reservoir itself and second the forces which operate in propelling oil from the reservoir into the wells. These factors may be artificially influenced; for example, porosity and permeability may be altered, and rock pressure may be controlled or partially restored by repressuring, flooding, and other methods. The results of some work that has been done at the University of Illinois on limestone reservoirs were presented, and their possible application to oil field procedure was discussed.

Two kinds of porosity in oil reservoirs are distinguished: (1) Continuous porosity, which is suited to the accumulation and production of oil and (2) discontinuous porosity, which is unfavorable for accumulation and production. It is believed that in most limestone reservoirs continuous porosity has been reduced since the time of accumulation of the oil.

In contrast to sands, in which the porosity of a single bed is usually uniform, limestones often have extreme variations in porosity even in the direction of the bedding.

The ideal condition, in which porosity and permeability are uniform throughout an oil reservoir is rarely encountered and practically never in the case of limestone.

In limestone fields there are porosity trends which are more important than structure. Therefore in the development of a limestone field the first step is determination of the porosity trend and the planning of drilling in accordance with that determination.

If repressuring of a limestone reservoir is attempted, it will be found impossible to direct the air or gas along definite bedding planes, because the channels will cross these planes. Because of the irregularity of the openings, oil will tend to become trapped in the local low areas and the introduced gas will pass by without coming in contact with the oil. . . . Thus repressuring would not appear to be a method which can be applied to most limestone reservoirs.

Where a natural water flood exists in a limestone reservoir it is useless to consider adding more water. Where there is no natural flood production might be increased if a field were under unit control so that water might be introduced in all edge wells until the oil was forced to the higher parts of the structure. . . . Such a procedure would be expensive and the organization of the field would present almost insuperable difficulties.

A major company operating many limestone wells in the Mid-Continent estimates that recovery from limestone resulting from efficient pressure control is about 80 per cent of the oil in the reservoir which is in the area drained by the wells. However, much of the oil in the field is not in the area drained by the wells. To recover this oil it is necessary either to increase the number of wells or to increase the area drained by the existing ones. This leads to a consideration of acid treatment.

At present, shooting in limestone fields has been largely displaced by acid treatment which has become a routine method of completing wells in many areas. Unlike explosives hydrochloric acid is highly selective in its action. If a mixture of calcite and dolomite is treated with acid, practically all of the calcite is dissolved before the dolomite is affected. Thus, in a dolomitic reservoir with an abundance of secondary calcite, the calcite will be removed, thus restoring in part at least, the original porosity.

Because of the nature of limestone reservoirs, and the presence of secondary calcite in these reservoirs, it is believed that normal production methods will produce all of the recoverable oil from the area tributary to the well. Where the yield is smaller than should normally be expected, additional wells should be drilled, and these should be spaced according to porosity trends, rather than on some sort of a fixed geometrical pattern. Repressuring and flooding are not believed to be effective aids in increasing total ultimate production, but acid treatment has been proved by experience to pay handsome returns. By increasing the drainage area of individual wells, the proper use of acid treatment may also make it unnecessary to drill additional wells at much greater cost.

Unit Operation Is Successful in Sistersville, W. Va., Pool

An outstanding example of efficiency and cooperation in unit operation attained is had in the joining of the Hope Construction & Refining Co., through its management, H. C. Cooper, with J. P. Flynn of the Reno Oil Co., W. L. Sutton of the Sutton Brothers Oil Co., H. S. Tack of the American Oil Development Co., Tuel & Thoenen of Tuel & Thoenen Oil Co., and the co-operation of the Pure Oil Co. in selling their minor holdings, the Sistersville oil pool, West Virginia, to be consolidated into an efficient recovery unit with undivided oil interests.

This pool, H. R. Pierce of the Oil & Gas Recovery Co. said in a recent address, covers approximately 25 square miles of producing oil territory, having had initially drilled within its boundaries, approximately 1,500 wells, with 400 of these wells still producing. This pool has the largest individual oil reserves of any single pool in West Virginia.

The operation of this pool under joint ownership since May 1, 1933, Mr. Pierce says, has fully justified the judgment of the men who combined it into a workable unit from an expensive abandonment project.

One farm in West Virginia has been under a settled gas cycle for the past six years and has averaged over 1,510 bbls. of oil per well per year during this period.

This farm has produced under artificial recovery methods approximately one-third as much oil as was produced from it by natural production methods during 33 years, and the wells are still averaging more than 1,300 bbls. per well per year.

Under properly applied recovery methods, this farm should produce more oil under artificial production than it produced during its 33 years of natural decline. Its average production per well per year under artificial recovery during the past six years was more than it has produced per well during any year since 1902 by natural means.

The oil production from one group of 20 wells in the Sistersville oil pool has been increased from 194 to 750 bbls. per month. The yearly production for 1934 was more than its total production for 1917, or 18 years ago. Of the 400 wells in the field, approximately 100 have been affected by artificial recovery. They now average more production per month than they averaged 14 years ago.

This portion of the pool is not what is considered under artificial recovery—it is merely in the trial stage. Previous to the consolidation of this pool, there was purchased from outside sources to operate the wells within its boundaries, over 100,000,000 feet of gas per year. Since its consolidation, and up until May 1, 1935, there was no gas purchased for operation or recycling purposes. By a greater efficiency in operation there was made available gas for operation and cycling, with which the above results were obtained.

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Exploration for Oil Out in the Gulf Is Within Engineering Possibilities

By NEIL WILLIAMS

HOUSTON, Tex., July 8.—A systematic and thorough exploration by geophysics for salt domes in the Gulf of Mexico off the coast of Texas and Louisiana is expected to be launched by various major companies in the not distant future.

Ample evidence of the existence of potential oil fields in the Gulf of Mexico has been given. Accounts of early day mariners have recorded "oil ponds" in various places in the Gulf, so definite and continuous as to have been charted. Such "oil ponds" are believed to indicate seepages from submerged petroleum entrapments. At some places there is a "boiling," or bubbling of oil.

It is believed that within the territorial waters as far as 3 miles off shore it will be feasible in most places to carry on operations.

Within such limits there are comparatively few places in which depths might be considered excessive. The continental shelf, like the coastal plain above tide level, dips off gradually, and out to about 3 miles depths below 25 to 30 feet ordinarily

Geophysical crew working in exploration for possible salt domes in offshore waters along the Texas Coast. In this picture, the truck carrying the recording instruments got too close to the water and with its rear wheels stuck in the quicksand an effort is being made to tow it back to shore

are not found. Such depths are not prohibitive of drilling. Along the Pacific Coast development is being done in 40 feet of water. On the Gulf Coast itself, considerable work has been done in semi-protected bays and other land-locked water bodies Some of this has been in tidewater to 15 feet deep, and basically there is no material difference in development in 25 to 40 feet of water.

The chief hazard would be occasional hurricanes. But these operations would be no more exposed than some on land close along the shore.

Even beyond the 3-mile limit, out as far as 30 to 35 miles, depths do not exceed 10 fathoms (60 feet) generally, and in many places the ocean floor rises to within 25 feet of the surface. If need for additional reserves becomes urgent, it may be possible to extend exploration and development to some parts of this area, but there is no early probability of this, which for the present can be looked upon as economically and practically impossible. Also, outside the territorial waters complications would arise over exploration and development rights and ownership claims.

The continental shelf, as disclosed by sonic soundings by the Coast and Geodetic Survey, continues to dip gradually seaward, becoming more and more rough and broken farther out. At the edge, about 90 miles from shore, the depth of the water is around 600 feet. At that point the floor of the ocean drops off sharply, and within the next 25 miles a depth of 3,600 feet is recorded. Twenty miles farther out, the depth increases to 6,000 feet, and from there the sharp descent continues into the Sigsbee deep, 12,000 feet.

Just off the edge of the continental shelf in that region of 2,400 to 3,600 feet of water, the topography is extremely uneven. Soundings reveal the features of mountain folds, fault scarps, anticlinal trends, and tectonic characteristics of particular interest to geologists, so far as these structural conditions have a bearing on possibilities of buried domes or structures under the continental shelf closer to shore.

Some of the geophysical exploration companies, as well as geophysicists with major companies, have been giving study to the conditions, factors involved and procedure to be followed in geophysical exploration in the Gulf. The discovery of salt domes and fields off the shore will rest largely on geophysics, as no company would attempt such promiscuous wildcatting, even on the strength of seepages or domal rises in the ocean floor. Consequently, geophysics is going to play a more important part than on the coastal plain itself.

There will be no unusual problems involved in geophysical exploration offshore, nor will there be any material difference basically in methods or procedure.

If a company is interested in working only a limited section along the coast, and is not concerned with a general exploration for salt domes, reflection shooting might be used exclusively, even in preliminary checking. This method probably would be followed in detailing of prospective domes found by other methods, and a company might figure that as long as the area is to be worked finally by reflection, this method might be used in the beginning.

However, if a company desires to make a general survey along extensive sections, refraction shooting possibly would be more advantageous as more territory could be covered in much shorter time and at less cost. Domes indicated in this survey could be localized and detailed by reflection if desired. However, operators have reached a high degree of efficiency in detailing by refraction methods, and the entire work can be done by refraction.

It is believed a strip of as much as 3 miles wide, adjacent to and extending the entire length of the Louisiana and Texas coast line, could be shot very easily and without excessive costs, and possibly with less difficulty than inland. Practically the entire shore line is readily accessible. Much of it consists of long stretches of flat, sand beaches, especially along the Texas coast, and crews and equipment can be moved from station to station easily.

In preliminary shooting adjacent to the shore line one of two procedures could be followed. It

Geophysical boats in service in the Gulf of Mexico off the coast of Texas. The rear boat is carrying the dynamite for the shooting operations

would be possible to shoot from the shore to detectors, or receiving instruments, set up on boats out in the Gulf, or shots can be placed at points out in the Gulf with detectors set up on shore. The latter would prove more satisfactory as it is easier to set up the detectors on shore, and in shooting from out in the water it is unnecessary to dig shot holes. It is only necessary to place the

The Gulf of Mexico as viewed from the top of a derrick in the High Island Field, Galveston County. In the foreground is a drilling well. The hard surfaced road which parallels the shoreline from Bolivar Point to Sabine Pass, a distance of 60 miles, can be seen in the background. This road is excellent for movement of seismograph set-ups

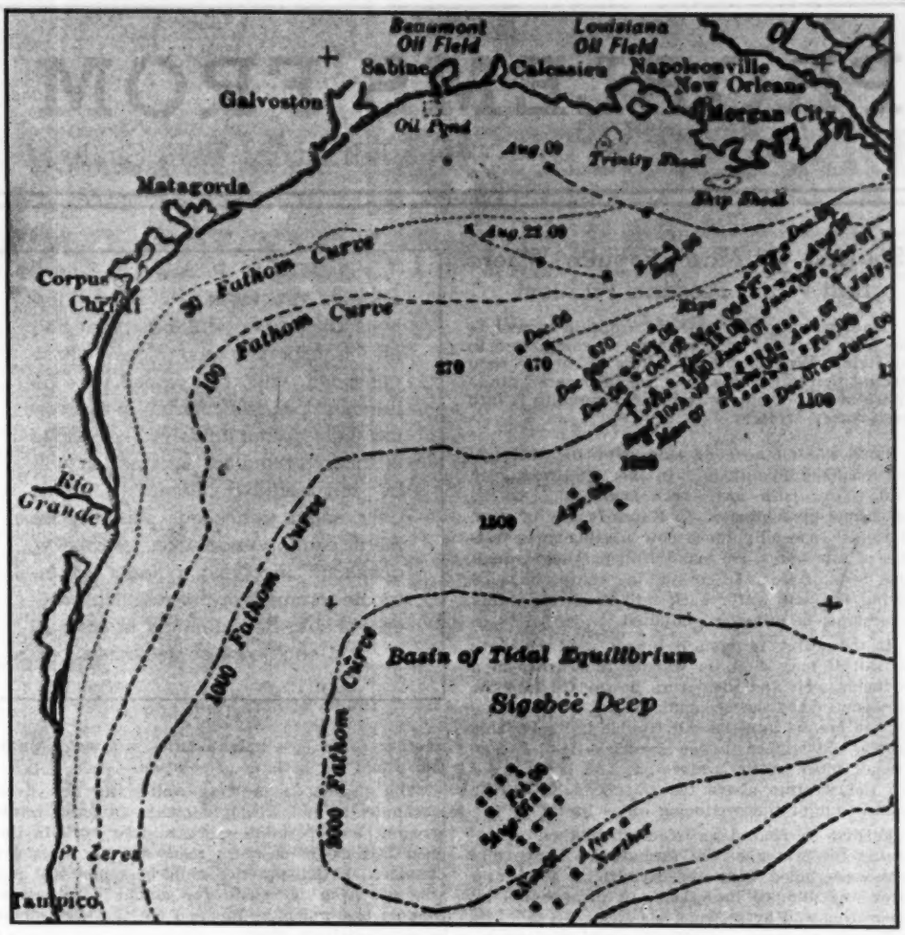
dynamite charge in a sack, weight it and throw it overboard.

To pick up domes 5,000 feet and deeper at points between 2 and 3 miles offshore, shots would be placed along a line paralleling the shore between 6 and 8 miles out. The distance, however, at which the shooting is done depends on the range desired. For those domes immediately along the shore line, 3 miles out probably would be sufficient, and in such circumstances detectors naturally would be set up at corresponding distances inland.

Six detectors set up along the shore and spaced at uniform intervals over 1½ miles would be deemed advisable for each shot. The detectors would be buried in the sand with lines to the recording instruments. Along a marshy shore, detectors would be placed in the water with recording instruments in boats. With firing of the shot and recording of speeds to the respective detectors, the setup would be moved along the coast.

In marking locations where shots will be placed, boats will place buoys at the positions to which they are directed from triangulation stations on shore. Two stations could be set up on shore about 2 miles apart, one out from each end of the row of detector locations. The distance apart does not have to be constant but it is believed 2 miles would permit sufficient accuracy in calculations. On extremely clear days, the boats possibly could be sighted with transits from the triangulation stations and directed by radio communication to the proper position. If the boats are too far out to be sighted, smoke bombs could be set up. Perhaps better, the work might be done at night with the boats sending up flares. The boats could determine their position by radio compass but it is likely the setting up of triangulation stations would prove more satisfactory. Communication between the triangulation stations in calculations could be by telephone or by radio.

Diagram of detector set-up for refraction shooting in geophysical exploration for salt domes in Gulf of Mexico off the Texas and Louisiana coast. Detectors would be set up in a row along the shore to pick up the wave lengths from a shot fired out in the Gulf. For domes between 2 and 3 miles offshore the shot probably would have to be placed between 6 and 8 miles offshore. As each successive shot is fired and readings taken, the set-up would be moved along the coastline. Triangulation stations for sighting position of shot point are indicated at either end of the row of detectors. The drawing is not drawn to any particular scale



Map of portion of Texas Gulf Coast showing depth in fathoms (1 fathom equals 6 feet) of adjacent waters of the Gulf of Mexico and of the various bays and inlets

With placing of buoys at locations for shots, the work of the boats is finished. With everything in readiness on shore, another boat carrying the dynamite places the charge, and at a signal from shore fires the charge. With the readings taken on shore, the dynamite boat moves to the next location.

When indications of a dome are picked up by any one of these successive shots, cross shooting then can be undertaken to "tie" the dome as to its exact location and distance from shore, and when the position of the dome is determined, detailing can follow. Such work probably will necessitate use of boats for recording instruments as in some positions detectors would have to be placed out from the shore crosswise with the preliminary reconnaissance.

That section between Sabine Pass and Bolivar Point, which is the coast of Jefferson, Chambers and Galveston Counties of the uppermost portion of the Texas coast, is receiving the first attention. A hard surfaced road follows this entire stretch of 60 miles. The stretch is perhaps the most accessible and also is looked upon as perhaps the most promising, being especially well situated in respect to the concentration of domes and fields on the landward side. Across from Bolivar on Galveston Island, a packed sand beach extends the length of the island southwestward.

The well known oil seepage just off Sabine Pass is an incentive for first work along that portion of the coast. Humble Oil & Refining Co. has under lease from the state a block extending 3 miles offshore farther down the Jefferson County coast. These leases were taken the first part of the year covering what the company believes to be a salt down lying partly under the coastal plain and partly under the continental shelf.

In drilling wells close to shore, it is possible deflected drilling can be put to good advantage. Locations can be made on shore and the holes drilled to any desired location out in the Gulf within certain drilling limits. Several holes can be drilled from one setup, saving in the setting-up costs.

Deflected drilling would have place even on locations out in the water, particularly when rigs are set on expensive piling foundations. With it possible to drill four and five holes from one location, exploring a wide area around a central location, the cost of setting up, if separate holes were drilled, is eliminated. This practice has been followed by Texas Co. in some of its development operations in the coastal marsh districts of southern Louisiana.

Various types of structures and foundations have been used for drilling wells in water beds. These include heavy piers such as used along the California coast; piling foundations set up in the water, necessary particularly when the operations are at a substantial distance from shore and where the location is in open water too deep for matting bases; and matting foundations for use in shallow water and marsh lands. The latter two types have been used extensively on the Gulf Coast, especially in southern Louisiana in lakes and bays.

The Texas Co. has developed large sea-going submersible barges for use in its maritime operations in coastal Louisiana.

The chief hazard would not be to the drilling wells but to the completed producers. The prevention of wells getting out of control as a result of storm damaged well connections is a serious problem as out in the Gulf there would be small chance of repairing damage and whole fields might be lost. However, there now are available blank chokes which can be run into producing wells to shut off production at the bottom. In the event of approaching storms, of which there generally is ample warning, these chokes can be run in all the wells, and if the well connections are broken off, the only loss, although large, would be to the equipment.

PROBLEMS FROM READERS

Edited by T. F. Smiley

"Soaking Oil Man" Popular Where Salt Water Presents Problem

I am writing for some information regarding the best methods of disposing of salt water in oil fields. Would surface ponds be better than forcing the salt water into the salt water sand? There must be some way besides running it into fresh-water streams.—H. S.

Both the methods of salt-water disposal you mention have advantages. In the Hendricks Pool, Wink, Tex., both have been employed, but the ponds now predominate. In Kansas many of your oil fields, especially those now making large volumes of salt water, are found after passing through thick beds of salt. In considering the problem of forcing the salt water back into the ground this factor must be properly evaluated.

If the water is pumped into a stratum above the salt it may find its way to the casing in a producing well and then work downward into the salt beds. Once the accumulated water above the salt bed breaks into the salt trouble is likely. This actually did happen in the Hendricks Pool and as a result much of the water that had been forced into the stratum above the salt beds had to be pumped out of the producing oil wells later.

Failing to find a satisfactory method of returning the water to the formation, surface pits were constructed near the Hendricks Field and water was pumped into them. It disappeared by evaporation and by seepage.

Kansas presents a difficult problem for surface storage because the annual rainfall exceeds evaporation. In West Texas the rainfall is not as great as evaporation of water from the ponds.

At a meeting in Topeka engineers for the U. S. Bureau of Mines suggested that streams that do not flow potable water be condemned by the state and used as open sewers. Under this method natural drainage would be made available and the salt water allowed to intermingle with larger volumes of other water so that the salt content would be diluted and in time practically vanish.

One of the most serious problems in connection with salt-water disposal centers about damage suits that are said to be profitable to a certain type of lawyer and as such cases are heard before juries composed of friends and neighbors of the plaintiff it is said to be a common practice to "soak the oil men." It is understood that at this time more than 600 water suits are pending in Kansas. If the state would enact laws protecting both the streams and the oil producers, with justice assured to those who make their complaints, the engineers of the petroleum industry would be able to find ways to dispose of salt water that must be produced with the oil.

This salt water problem is as old as the industry and until state legislatures pass laws that do justice to all parties it will continue to be a source of revenue for some persons. The mechanical problems are different enough without being complicated from outsiders.

There is no direct answer to your questions, although no salt water problem is so serious but that it can be solved from an economic standpoint if the engineer handles it without restrictions.

The quantity of salt water that can be produced is limited by the cost of pumping in many instances. No company is going to continue to pump a well when it is not making enough oil to be profitable. Therefore the total volume of salt water that is likely to be produced by mechanical means is relatively small. Where wells flow salt water, as in the Hendricks Field, there usually is almost worthless land surrounding the field so that the water can be handled economically. Nature seems to balance matters, and if the greed of men and the tendency of one group to impose upon another could be eliminated the salt water problem would not be hard of solution.

You present a problem which can be solved mechanically and without damage to fresh water streams, but operators are afraid to work in the open because of lawyers ready to file suits for damages. If that practice could be suppressed and still provision be made for actual damages so that no one would be imposed on, the way would be comparatively clear.

Under existing conditions engineering opinion is that shallow reservoirs in which the salt water could be stored and permitted to evaporate as much as possible and to be diluted by rain, and later flushed into surface streams already contaminated offer the best solution in your area.

Water flooding of sands has been done in many fields but to do this successfully only fresh water can be used. If water containing appreciable quantities of chemicals or material in solution is forced into a formation solids may be precipitated in the pores, soon plugging the stratum so that it will be impossible to force more water into it.

Readers are invited to send questions relating to drilling, producing and transporting operations. These questions will be placed in the hands of persons capable of answering them authoritatively. The names of those writing for information will be considered confidential, initials only being published. This department cannot undertake to answer questions involving patents or intricate formulas or those which properly should be submitted to consulting engineers or geologists.

WHY THEY CALLED IT
Nowata

To minds unfamiliar with the derivation of Oklahoma place names Nowata, name of a town and of an oil field in the northeastern part of the State, is likely to suggest a remodeled form of "no water" and to stir speculation as to whether there might not have been at some time a devastating drouth in the district. Neither scarcity nor abundance of water had anything to do with the origin of the word. On the contrary it is closely related to the idea of hospitality, for it is a corruption of the Delaware Indian "no-we-ta," meaning welcome. The Nowata oil field was at one time the largest in Oklahoma in area and production.

Packer's Effect on Life of Well That Flows Through the Tubing

There seems to be rather wide difference of opinion over whether the life of a well flowing through tubing is increased by installing packer near the bottom. I would be glad to get an engineering opinion on this question.—E. R. E.

Your inquiry seems to involve the advantages of a packer on a tubing string in a flowing well and to make definite answer it would be necessary to have additional data. If the question is simplified to cover the advantages of tubing a well early in its life to increase natural flow conditions, the answer is: Yes, it is advantageous. In fact practically all wells in modern fields are being tubed as soon as completed.

To quote from a paper by two well-known California engineers, Hallan N. Marsh and Bruce H. Robinson, General Petroleum Corp. of California: "It is generally believed that the flowing of wells through tubing instead of casing results in the conservation of gas. It is further believed that use of tubing prolongs the flowing life of a well and results in greater ultimate recovery.

"Experiments in the flowing of Buckbee zone wells in the Santa Fe Springs Field, California, has not only substantiated both of these beliefs, but has led to the further conclusion that the use of tubing results in a greater cumulative flowing production, even in a highly competitive field like Santa Fe Springs, where the wells concerned are closely offset by wells of both the same and other companies flowing through casing. Further, gas-oil ratio has been so reduced that greater ultimate recovery can be expected."

With many fields operated under prorated production rates the use of tubing has sometimes been resorted to for the purpose of curtailing production rate. But regardless of this phase of the problem, it is now generally agreed among production engineers that the use of properly selected tubing for flow strings is advantageous.

Packers on the tubing placed near the bottom of the string would tend to restrict flow of oil and gas up in the annular space between tubing and casing. There is no special advantage in restricting fluid level outside of the tubing, for this height is proportional to the formation pressure, and will vary as the formation pressure varies.

If a well is being produced intermittently the fluid level may be lowered during the period of flow. When the well is shut in the fluid level should rise again until the pressure exerted by the fluid column against the face of the formation is approximately equal to the formation pressure exerted at the bottom of the drilled hole.

Without the packer between tubing and casing the fluid level outside the tubing would represent the level above which the oil had to be lifted by the energy exerted by the expanding gas. If the packer were used the formation pressure would be exerted against the bottom side of the packer, which would have the same effect as building up a fluid column between tubing and casing and above the producing formation.

For simplicity the tubing without packer is preferred. If the casing and casing head are tight the annular space between tubing and casing will not hold a great deal of fluid or gas and should be quickly filled to the normal fluid level. Gas will occupy the space above the fluid and, being shut in at the casinghead, should exert some pressure downward on top of the column of fluid.

Packers play an important part in correcting conditions at the bottom of the hole where it is desirable to restrict the zone of production; that is, to separate strata producing gas, oil and water in any desired manner to meet the wishes of the production superintendent of the property.

East and East Central Texas

FIVE WILDCAT LOCATIONS ARE STAKED IN EAST TEXAS FIELD

By L. E. BREDBERG

DALLAS, Tex., July 8.—Five wildcat locations were staked in the East Texas district during the week. Only two wildcats were abandoned, one being a shallow test southwest of Waco in McLennan County. The other was Fair and others' No. 1 Terrell, in the Eli Delks Survey, 2½ miles northeast of the Sand Flats in Smith County.

Woodley and Bentley have made location in the northeast corner of a 245-acre tract in the John McDermot Survey, 1 mile southwest of Dalby Springs in Bowie County. Another semiwildcat is Kirby Petroleum Co.'s No. 1 C. L. Litchfield in the I. Clendennen Survey, north of the Cayuga area in Henderson County. J. K. Wells made location for a wildcat to be drilled on the W. E. Warren tract in the Thomas Hanna Survey, 4 miles south of La Rue, same county.

J. P. McKinney and others have staked location in the old Wortham Field, 300 feet northwest of Magnolia Petroleum Co.'s No. 1 in the Sarah McAnulty Survey in Limestone County, on an old Magnolia lease.

J. W. Shipman and others have a rig on land held by the Citizens National Bank in the Juan Jose Y'Barbo Survey, 4 miles northeast of Henderson in Rusk County, approximately 300 feet west of the old Ross and Seward No. 1 Burton, abandoned several months ago.

A block is being assembled in the southwest corner of Van Zandt County in the J. P. Borden, Garcia J. Evans, Cozenova and adjacent surveys, approximately 7 miles southwest of Jackson.

Two miles southwest of Winnsboro in Wood County, Roger Wolfe is assembling a block in the northeast part of the county in the E. Allen, M. Arocha, Gillion, Mary Ward and adjacent surveys. A Woodbine sand test will be drilled. Mr. Wolfe drilled in the Rusk discovery in Wood County for Wood and others last year.

C. D. Neff and others' No. 1 H. G. Small, in the I. Greeson Survey, southwest of Crossroads and about 3 miles north of the Cayuga extension area, but in Henderson County, logged base of the Austin chalk at 3,735 feet, making it around 200 feet lower than Worsham's No. 1 Wathen, extension producer to the Cayuga area. Elevation is 284 feet. It is coring below 4,040 feet.

Stewart and Watson of Fairfield are selling spreads in their block 2½ miles east of Red Lake and southwest of Turlington in Freestone County. The test is expected to be spudded within 30 days.

Taubert and McKee have made location for a Woodbine sand test one-half mile south of their abandoned No. 1 Dodd. The new location is about 4 miles east of Malakoff in Henderson County.

A block of approximately 5,000 acres is being assembled 2 miles east of Canton, county seat of Van Zandt County, in the G. De Toro, D. Towns, W. R. Powell and Nugent Survey, for a Woodbine sand test. J. B. Russell has made location in the center of his block southwest of Boston and is expected to drill a Trinity sand test for this part of Bowie County.

B. F. Allen and others are getting up a block of around 11,000 acres north and northwest of Ravenna, in Fannin County, for a 3,000-foot test, in surveys south and bordering on Red River.

Florence Oil Co.'s No. 1 T. Smith, in the Jose Pineda Survey, 4 miles northwest of Jacksonville, in Cherokee County, topped the Austin chalk at 4,492 feet and is drilling below 4,700 feet in chalky shale.

A block of 3,000 acres is being taken southeast of Blackfoot in Anderson County by an independent presumed to be taking it for Texas Co.

EAST TEXAS FIELD

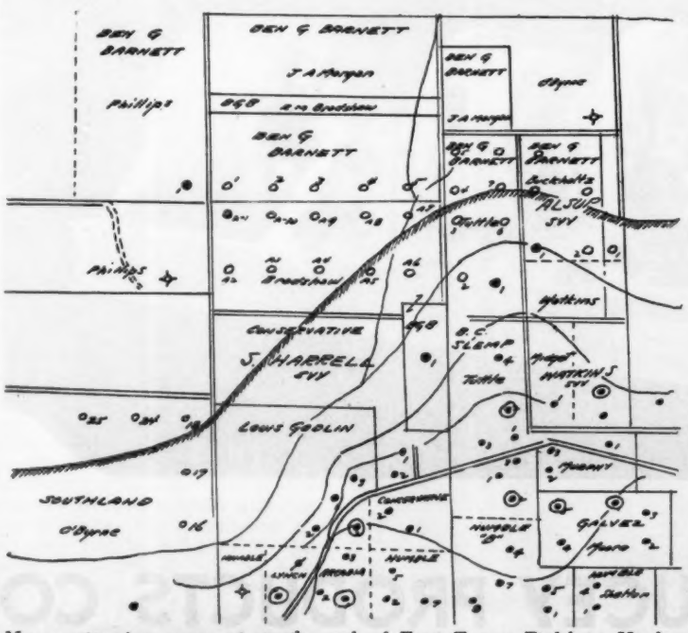
The main feature in the East Texas Field was the slumping of locations to under half of the number they have been averaging each week for six months. This week there were only 57 locations staked whereas last week they totaled 117. This decrease is due to the Texas Supreme Court decision upholding the spacing law. District courts are now prevented from issuing injunctions against the commission in regard to preventing exception wells to be drilled.

There were 92 wells completed this week of which 8 were pumpers, 6 completed swabbing and 2 abandoned. There are 343 active tests in the field with completions amounting to nearly twice the number of locations each week.

Companies are drilling only wells forced by offsets and since exception permits are not to be granted there will be few offsets necessary. Humble Oil & Refining Co. is to curtail its drilling when its present program is completed, Gulf Production Co. and Tide Water Oil Co. are to act similarly, and Magnolia Petroleum Co. is to drill only necessary offsets when its present wells are completed. Sinclair Prairie Oil Co., which curtailed its drilling when its daily production reached 20,000 bbls. per day, but later started drilling again, is to drill only necessary offsets. Atlantic Oil & Producing Co. and Humble Oil & Refining Co. each completed seven wells this week, Sinclair Prairie Oil Co. completed six and Gulf Production Co. completed five. Other major producers completed but few each.

Major producers in the field now have one well to each 8.08 acres whereas all others have an average of one well to each 5.54 acres. This makes an average well density of one well to each 7 acres. There are now over 18,100 wells.

Yandell Rogers Oil Co. of Tyler has sold 440 proven acres including 16 wells and 45 drilling locations in the Daniel Clark Survey east of Overton, Rusk County, to R. G. Trippet and A. H. Meadows of Shreveport, La., owners of Hurtle Oil Co., for a reported consideration of $850,000. These purchasers recently acquired the C. & G. Oil Co.'s properties in the field for a consideration reported at $1,000,000.



New extension area at north end of East Texas Field in Upshur County. Wells circled are those which are making water

EAST TEXAS COMPLETIONS

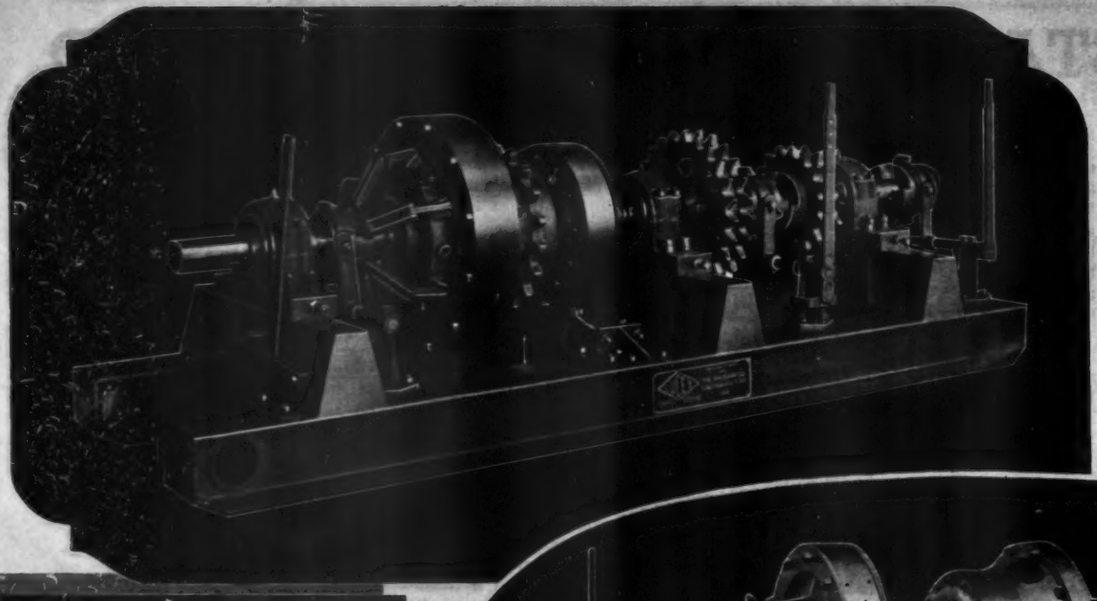
Gregg County

Amerada Petroleum Corp.'s No. 11 Killingsworth, top pay 3,597 feet, total depth 3,603 feet, initial production 75 bbls. per hour. Arkansas Fuel Oil Co.'s No. 15-A Lathrop, top pay 3,564 feet, total depth 3,579 feet, initial production 23 bbls. in 15 minutes. Atlantic Oil Producing Co.'s No. 20 Duncan, top pay 3,599 feet, total depth 3,658 feet, initial production 140 bbls. per hour; No. 73 Moore, top pay 3,504 feet, total depth 3,530 feet, initial production 142 bbls. per hour; No. 75 Moore, top pay 3,500 feet, total depth 3,531 feet, initial production 136 bbls. per hour. C. & G. Oil Co.'s No. 17 Harris, top pay 3,488 feet, total depth 3,508 feet, initial production 30 bbls. in 15 minutes. Collins, Gray and others' No. 7 Fisher, top pay 3,419 feet, total depth 3,434 feet, initial production 60 bbls. per hour; No. 8 Fisher, top pay 3,553 feet, total depth 3,597 feet, initial production 90 bbls. per hour. Great Plains Oil Co.'s No. 5 Christian, top pay 3,602 feet, total depth 3,620 feet, initial production 30 bbls. in 30 minutes. Magnolia Petroleum Co.'s No. 17 Ziegerl, top pay 3,466 feet, total depth 3,489 feet, initial production 124 bbls. per hour. Ray & Miller's No. 5 Jones, top pay 3,546 feet, total depth 3,596 feet, initial production 80 bbls. per hour.

Shell Petroleum Corp.'s No. 13 Stinchcomb, top pay 3,456 feet, total depth 3,512 feet, initial production 40 bbls. per hour. Stanolind Oil & Gas Co.'s No. 4 Shoults, top pay 3,662 feet, total depth 3,694 feet, initial production 55 bbls. Sutton and Hawkins' No. 13 Whittaker, top pay 3,514 feet, total depth 3,530 feet, initial production 35 bbls. in 20 minutes. Tide Water Oil Co.'s No. 14-A Nettleton, top pay 3,518 feet, total depth 3,533 feet, initial production 10 bbls. in 10 minutes. Travis and Weir's No. 2 Owen, dry and abandoned at 650 feet. Woodley Petroleum Co.'s No. 5 Harris, top pay 3,520 feet, total depth 3,536 feet, initial production 25 bbls. in 15 minutes through three-quarters inch choke. Amerada Petroleum Corp.'s No. 10 Lacy, top pay 3,564 feet, total depth 3,578 feet, initial production 50 bbls.; No. 11 Lacy, top pay 3,570 feet, total depth 3,585 feet, initial production 50 bbls.

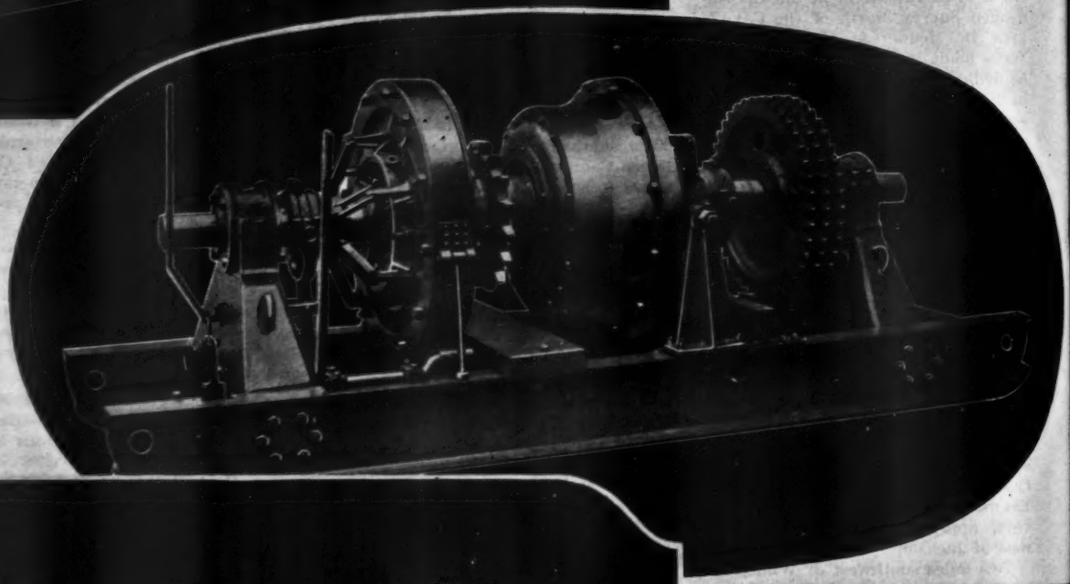
Atlantic Oil Producing Co.'s No. 5-B Andrews, top pay 3,616 feet, total depth 3,625 feet, initial production 130 bbls. per hour; No. 11 Smith, top pay 3,546 feet, total depth 3,569 feet, initial production 147 bbls.

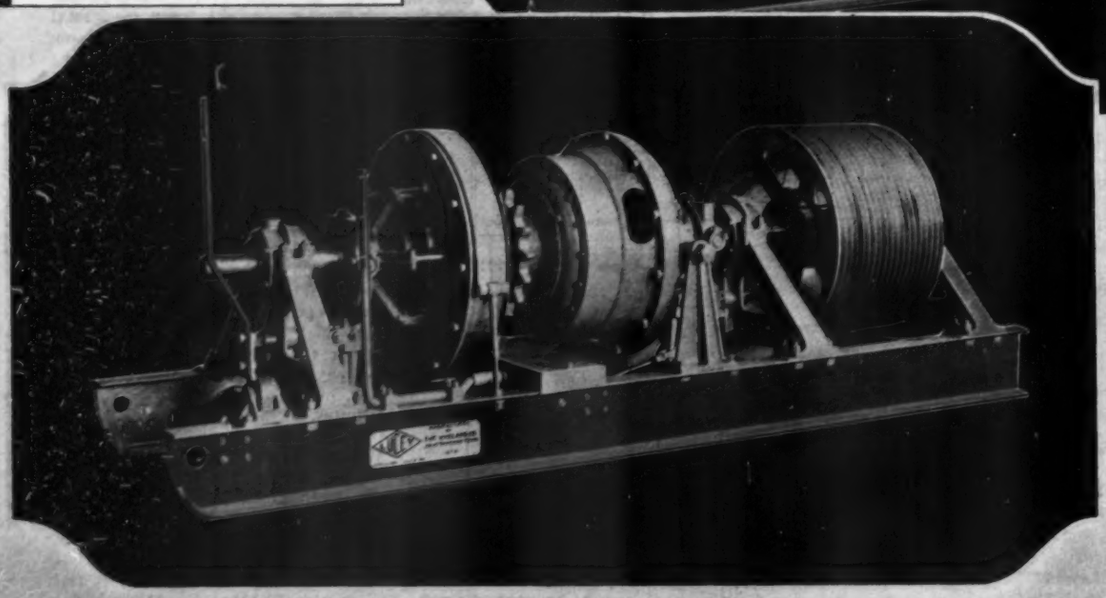
For EVERY Drilling Purpose a Heavy Duty Reverse Clutch by LUCEY



Type B-5083-APS two-speed rated at 202 H.P. at 200 RPM (Factor of 4). 30" Twin Disc forward clutch, differential gear type reverse clutch actuated by brake band around housing. 4½" shaft. SKF self-aligning roller bearings. Clutch illustrated (left) equipped with cut tooth sprockets for use with new Chabelco Type D-3125 double strand chain. Weight 7775 lbs.

Type B-4583-S rated at 480 H. P. at 200 RPM (Factor of 4). 36" Twin Disc forward clutch and 36" Twin Disc reverse clutch. 6" shaft. SKF self-aligning roller bearings. Clutch illustrated (right) equipped with sprocket for Chabelco high speed roller chain. Weight 10,290 lbs.





Type B-4850-S rated at 480 H. P. at 200 RPM (factor of 4). 36" Twin Disc forward clutch and 36" Twin Disc reverse clutch. 6" shaft. SKF self-aligning roller bearings. Clutch illustrated (left) equipped with "V" belt pulley. Weight 12,400 lbs.

PRODUCTS LUCEY CORPORATION

LUCEY PRODUCTS CORPORATION

TULSA, OKLAHOMA HOUSTON, TEXAS

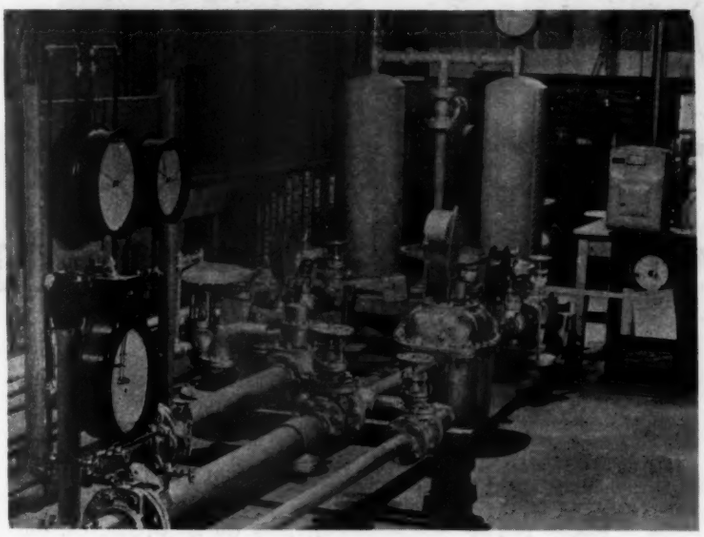
LUCEY EXPORT CORPORATION
NEW YORK CITY

Beard's No. 2 Elder, top pay 3,519 feet, total depth 3,552 feet, initial production 20 bbls. in five hours, pumping. Dyck Oil Co.'s No. 6 Blackman, top pay 3,671 feet, total depth 3,672 feet, initial production 20 bbls. in 15 minutes. Gulf Production Co.'s No. 11 Davis, top pay 3,564 feet, total depth 3,578 feet, initial production 75 bbls. per hour; No. 8 Hall, top pay 3,667 feet, total depth 3,681 feet, initial production 85 bbls.; No. 5 King, top pay 3,571 feet, total depth 3,586 feet, initial production 70 bbls. Halliburton's No. 9 Lacy, top pay 3,634 feet, total depth 3,638 feet, initial production 90 bbls. per hour. Kimbrell and Baldwin's No. 2 Carr, top pay 3,510 feet, total depth 3,539 feet, initial production 10 bbls. in 30 minutes. Sinclair Prairie Oil Co.'s No. 18 Lawther, top pay 3,523 feet, total depth 3,578 feet, initial production 25 bbls. in six hours, swabbing; No. 6 Walker, top pay 3,691 feet, total depth 3,692 feet, initial production 25 bbls. in 15 minutes; No. 7 Walker, top pay 3,671 feet, total depth 3,675 feet, initial production 21 bbls. per hour, swabbing. Sowell's No. 7 Luse, top pay 3,579 feet, total depth 3,580 feet, initial production 50 bbls. per hour. Stroube & Stroube's No. 6 Beall, top pay 3,552 feet, total depth 3,580 feet, initial production 27 bbls. in 90 minutes. Tippett's No. 3 Nichols, top pay 3,667 feet, total depth 3,678 feet, initial production 45 bbls. in 30 minutes.

Rusk County

Allen and others' No. 1 Dickerson, top pay 3,588 feet, total depth 3,738 feet, initial production 26 bbls. in 40 minutes. Empire Gas & Fuel Co.'s No. 12 Christian, top pay 3,730 feet, total depth 3,732 feet, initial production 15 bbls. in 15 minutes. Gulf Production Co.'s No. 19 Florence, top pay 3,659 feet, total depth 3,664 feet, initial production 45 bbls. per hour through three-quarters inch choke; No. 6 Oten, top pay 3,591 feet, total depth 3,691 feet, initial production 18 bbls. per hour through three-quarters inch choke. Humble Oil & Refining Co.'s No. 159 Crim, top pay 3,600 feet, total depth 3,656 feet, initial production 70 bbls. per hour. McMillan's No. 1 Wells, top pay 3,650 feet, total depth 3,751 feet, initial production 12 bbls. in six hours, pumping; No. 3 Wells, top pay 3,667 feet, total depth 3,750 feet, initial production 15 bbls. in 12 hours. Pewitt's No. 1 Mayfield, top pay 3,617 feet, total depth 3,622 feet, initial production 10 bbls. per hour, pumping; No. 2 Mayfield, top pay 3,634 feet, total depth 3,646 feet, initial production 10 bbls. per hour, pumping.

Sinclair Prairie Oil Co.'s No. 2-C Kennedy, top pay 3,660 feet, total depth 3,665 feet, initial production 20 bbls. per hour. Stanolind Oil & Gas Co. and others' No. 9 Powers, top pay 3,728 feet, total depth 3,730 feet, initial production 16 bbls. in 25 minutes. Tide Water Oil Co.'s No. 11-B Bean, top pay 3,608 feet, total depth 3,622 feet, initial production 25 bbls. in 10 minutes; No. 16 Leverett, top pay 3,636 feet, total depth 3,665 feet, initial production 25 bbls. in 15 minutes. Atlantic Oil Producing Co.'s No. 10 Thompson, top pay 3,695 feet, total depth 3,718 feet, initial production 120 bbls. per hour; No. 9-C Young, top pay 3,655 feet, total depth 3,689 feet, initial production 108 bbls. per hour. Fair's No. 10 fee, top pay 3,632 feet, total depth 3,642 feet, initial production 70 bbls. per hour.



View of new natural gas laboratory of the oil and gas department, University of Pittsburgh, Pittsburgh, Pa.

Gant, Garvin and Wegner's No. 7 Harris, top pay 3,604 feet, total depth 3,626 feet, initial production 17 bbls. per hour. Gulf Production Co.'s No. 35 Turner, top pay 3,701 feet, total depth 3,709 feet, initial production 20 bbls. per hour through three-quarters inch choke. Humble Oil & Refining Co.'s No. 11 Arnold, top pay 3,760 feet, total depth 3,810 feet, initial production 73 bbls. per hour; No. 51-A Kangerga, top pay 3,655 feet, total depth 3,691 feet, initial production 75 bbls. per hour; No. 17-A Silvey, top pay 3,702 feet, total depth 3,716 feet, initial production 67 bbls. per hour; No. 19 Wheelis, top pay 3,751 feet, total depth 3,743 feet, initial production 60 bbls. per hour. Jenkins Brothers' No. 2 Bradford, top pay 3,514 feet, total depth 3,594 feet, initial production 10 bbls. per hour, pumping. Johnson and Rogers' No. 6 Mullins, top pay 3,710 feet, total depth 3,794 feet, initial production 137 bbls. per hour. Marathon Oil Co.'s No. 24 Moore, top pay 3,627 feet, total depth 3,690 feet, initial production 74 bbls. per hour. Overtex Oil Co.'s No. 3 Rettig, top pay 3,658 feet, total depth 3,662 feet, initial production 20 bbls. in 29 minutes. Prince Brothers' No. 2 Herring, dry and abandoned 3,660 feet. Ray's No. 10 Pinkston, top pay 3,592 feet, total depth 3,622 feet, initial production 90 bbls. per hour. Retsal Drilling Co.'s No. 8 Maxwell, top pay 3,549 feet, total depth 3,610 feet, initial production 100 bbls. in four hours, swabbing. Salmon and Carter's No. 2-B Frederick, top pay 3,539 feet, total depth 3,572 feet, initial production 10 bbls. per hour, pumping.

Shell Petroleum Corp.'s No. 18-B Brooks, top pay 3,633 feet, total depth 3,719 feet, initial production 20 bbls. in 30 minutes. Sinclair Prairie Oil Co.'s No. 20 Wilson, top pay 3,635 feet, total depth 3,645 feet, initial production 40 bbls. in 15 minutes; No. 21 Wilson, top pay 3,658 feet, total depth 3,668 feet, initial production 35 bbls. in 30 minutes. Slaughter and Metcalfe's No. 1 Frederick, top pay 3,539 feet, total depth 3,567 feet, initial production 12 bbls. per hour, pumping. Texas Co.'s No. 15-A Jarvis, top pay 3,608 feet, total depth 3,624 feet, initial production 80 bbls. per hour. Tex-Jersey Oil Co.'s No. 2 Wooley, top pay 3,530 feet, total depth 3,630 feet, initial production 30 bbls. in two hours, swabbing. Tripp-Mead Oil Co.'s No. 9 Thompson, top pay 3,787 feet, total depth 3,806 feet, initial production 80 bbls. per hour. Tuberville's No. 1 Graham, top pay 3,644 feet, total depth 3,645 feet, initial production 10 bbls. per hour. Turman Oil Co.'s No. 9 Dark, top pay 3,689 feet, total depth 3,760 feet, initial production 45 bbls. per hour. Tysco Oil Co.'s No. 1-D Frederick, top pay 3,532 feet, total depth 3,565 feet, initial production 10 bbls. per hour, pumping.

Smith County

Arcadia Refining Co.'s No. 12 Green, top pay 3,775 feet, total depth 3,784 feet, initial production 35 bbls. in 30 minutes. Colony Oil Co.'s No. 3 Wright, top pay 3,675 feet, total depth 3,692 feet, initial production 60 bbls. per hour; No. 5 Wright, top pay 3,684 feet, total depth 3,694 feet, initial production 75 bbls. per hour. Florence Oil Co. and others' No. 1 Cole, top pay 3,766 feet, total depth 3,767 feet, initial production 60 bbls. in two hours. Hunt Production Co.'s No. 22-A Fair, top pay 3,645 feet, total depth 3,657 feet, initial production 36 bbls. in 15 minutes. Illinois Oil Co.'s No. 15 Mayfield, top pay 3,815 feet, total depth 3,870 feet, initial production 130 bbls. per hour; No. 17 Mayfield, top pay 3,810 feet, total depth 3,812 feet, initial production 125 bbls. per hour. Sinclair Prairie Oil Co.'s No. 51-A Mayfield, top pay 3,781 feet, total depth 3,785 feet, initial production 30 bbls. in 30 minutes. Sun Oil Co.'s No. 15-A Pace, top pay 3,825 feet, total depth 3,826 feet, initial production 20 bbls. in 15 minutes. Tex-Canadian Oil Co.'s No. 3-C Irion, top pay 3,763 feet, total depth 3,764 feet, initial production 20 bbls. in 20 minutes; No. 5-C Irion, top pay 3,738 feet, total depth 3,740 feet, initial production 20 bbls. in 20 minutes. Weaver and Crim's No. 8 Stone, top pay 3,745 feet, total depth 3,749 feet, initial production 20 bbls. in 25 minutes. Westgate Oil Co.'s No. 1 Cross, top pay 3,688 feet, total depth 3,700 feet, initial production 75 bbls. in 24 hours, swabbing. Fair and others' No. 1 Terrell, dry and abandoned at 5,230 feet, 2½ miles northeast of Sand Flat.

Upshur County

Barnett's No. 2 Buckholt, top pay 3,687 feet, total depth 3,697 feet, initial production 50 bbls. per hour, swabbing. Humble Oil & Refining Co.'s No. 17 Johnson, top pay 3,691 feet, total depth 3,714 feet, initial production 46 bbls. per hour; No. 9 Phillips, top pay 3,728 feet, total depth 3,731 feet, initial production 58 bbls. per hour. Sun Oil Co.'s No. 11 Ramsey, top pay 3,746 feet, total depth 3,747 feet, initial production 35 bbls. per hour.

McClennan County

Mahan and others' No. 1 Mann, dry and abandoned at 696 feet, southwest of Waco.

Ontario Gasoline Tax

TORONTO, Ontario, July 8.—A recent compilation shows that out of every $100 cash revenue collected by the province of Ontario in 1934, $41.40 came from motorists, an increase of $2.70 from the previous year. Of this amount, $25.80 represented gasoline tax and the balance license and registration fees.

Plant for generating electricity furnishing power for oil operations in the southern part of Sumatra

West and North Texas

By
L. E. BREDBERG

FIND OIL IN ECTOR WILDCAT; WINKLER COUNTY DISCOVERY

FORT WORTH, Tex., July 8.—High lights in the Permian Basin this week were the apparent discovery of another field for Winkler County, showing of oil in a wildcat in Ector County, large producer in the Means Fields, Andrews County, and the placing on the pump of the new Reagan County discovery.

Sid Richardson's No. 1 Walton, in Section 1, Block B-3, approximately 5 miles northeast of Kermit in Winkler County, appears as another field opener. It showed 1,700 feet of oil in the hole and some mud on a 40-minute test from 3,465-3,524 feet, bottom of hole. Another test, with packer set at 3,250 feet, showed it making only 1,500,000 feet of gas and 25 bbls. of fluid into the pit. It was believed heavy gas pressure held back the oil, so casing was run and cemented and the test is shut down waiting on cement to set.

This test attracted attention since it encountered an estimated 8,000,000 to 10,000,000 feet of gas at 2,945 feet in lime. It was shut down there to rig up rotary and install equipment in case heavy gas pressure caused trouble. Gas was killed once to allow continuance of drilling and prevent a blowout. It is on acreage farmed out by Pure Oil Co.

The encountering of gas, showing possibilities of an oil discovery, led Gulf Production Co. to stake nine locations on as many sections in its Keystone Cattle Co. block to the south and southeast of the Richardson-Walton test. No. 1, in Section 10, Block B-3, is about one-half mile due south of the Walton test. No. 1 Keystone Cattle Co. is not at a sufficient depth to pick up the oil showing in the Walton, but has had several gas showings. No. 2 Keystone Cattle Co., about 2½ miles southeast of the Walton test, in Section 17, Block B-2, is the deepest test on the Keystone block. It is down 3,675 feet drilling after making a drill stem test. It showed only 120 feet of mud in the hole, but there is sufficient mud to hold back any showing of oil, according to one of the men with the company. The Walton showing makes the Keystone block of Gulf look much better, but No. 1 and No. 2 Keystone Cattle Co. should be picking up the pay during the week if they are to prove producers from the same horizon as the Walton test, although Nos. 1, 2 and 3 have already showed some saturations at intervals.

Ector Wildcat Showing

An Ector County wildcat, Landreth Production Co.'s No. 1-A or No. 2 Scharbauer, in the NW ¼ of Section 13, Block A, P.S.L. Survey, 1½ miles north and a little east of the same operator's small discovery in Section 20, Block 44, Township 1n, T.&P. Survey, showed saturation from 4,130-65 feet and is drilling below 4,200 feet with 2,000 feet of oil in the hole. It is estimated good for 25 to 50 bbls. per day at present, but is drilling deeper and will drill to water unless a material increase in oil is encountered. If it drills to the water level, as in the well to the south, it will be plugged back and given a shot. A couple of weeks ago the company abandoned a test in the SW cor. of Section 18, Block 44, about 2 miles northwest and between the Scharbauer discovery and the Davidson-Cummins discovery. If No. 2 Scharbauer makes a well it will lead to the belief a pool may extend northeast from No. 1 Scharbauer instead of northwest as first expected.

Reagan Discovery

Dobbs Oil Co.'s No. 1 W. E. Friend, in Section 3, William Allen Survey, 5½ miles due south of Big Lake, Reagan County, started pumping test today and no gauge has yet been reported. This discovery is estimated good for 250 bbls. per day at total depth of 2,440 feet where it was plugged back after striking water at 2,465 feet. It will open the third field in the county. When its potential is taken if a well of commercial importance is proven companies and independents will bid on University lands to east and west expected to be put up. Empire Gas & Fuel Co. and associate company, Indian Territory Illuminating Oil Co., hold offset acreage to west and north and will probably stake locations when gauge is taken. Dobbs Oil Co. has staked location for a second test 1,280 feet due south of the discovery.

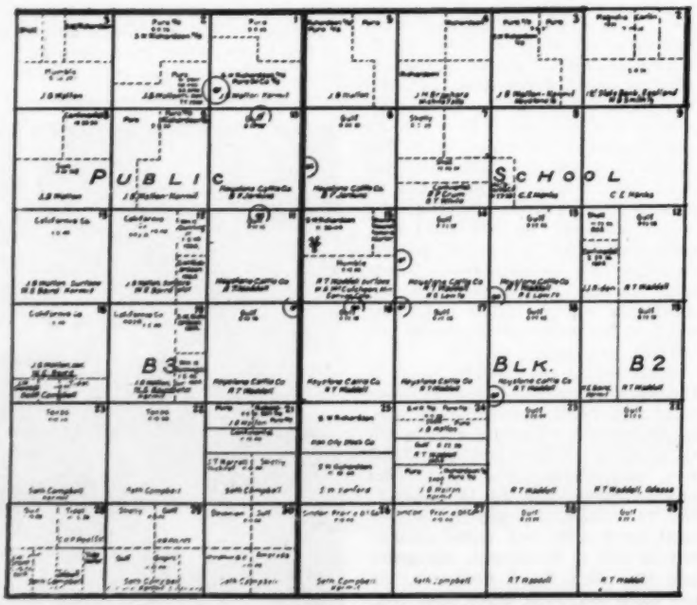
Best Well in Means Pool —Andrews County

Humble Oil & Refining Co. completed the best producer in the Means Field, northeast Andrews County, when No. 4 Means, SW Section 4, Block C-45, P.S.L. Survey, flowed at the rate of 1,180 bbls. in 24 hours from lime at total depth of 4,520 feet. Elevation is 3,185 feet, and higher on structure than any well in the field. It affords a short northwest extension. Before completing it was treated with 5,000 gallons of acid.

Honolulu Oil Co. and Llano Oil Co.'s No. 1-B J. E. Parker, Section 11, Block A-43, Andrews County, one-half mile southwest of the companies' No. 1 Parker discovery, struck sulphur water this week at 3,783 feet and drilled to 4,804 feet before plugging back to shut off water and complete. The best pay was topped at 4,627 feet. It will make the second producer in the Parker Pool about 5½ miles southeast of the Deep Rock Pool, the first pool found in the county, about 4½ years ago.

Pecos County Duster

Another dry hole was recorded in the White and Baker area, about 9 miles west of the Yates Field, Pecos County, when Gulf Production Co.'s No. 6 White and Baker, in Section 94, Block 194, G.C.&S.F. Survey, was given up as dry at total depth of 1,793 feet. This test is about 3 miles south by west of the company's No. 3 White and Baker, a small discovery in Section 3, Block 207, T.C. Railway Survey, discovered in December, 1934, at total depth of 1,826 feet after topping a lime pay at 1,824 feet. That discovery made 27½ bbls. per day. It was later deepened to 1,840 feet, but with no profitable results. Seven dry holes have been drilled in the vicinity, and one gasser, completed a couple of weeks ago by Cardinal Oil Co., about 1½ miles south of the producer. It is in Section 40, Block 194. Total depth is 1,784 feet. Gulf has made location for No. 7 in Section 15, Block Z, T.C. Survey. The discovery is to be deepened.



—Map courtesy Zingery Map Co., Fort Worth.

Sid Richardson's No. 1 Walton, marked by large circle, in Section 1, Block B-3, approximately 4½ miles northeast of Kermit, Winkler County, Texas. Gulf Production Co.'s nine tests on its Keystone Cattle Co. block are shown to the south and southeast of the Richardson test

Crane County Wildcat

B. H. Fleet is to spud a lime test by August 1 on a block assigned to him by the Texas Co. in the southeastern part of Crane County. Location will be in Section 1, Block 35, H.&T.C. Survey, on the R. S. Pershing ranch. Dobbs Oil Co. is drilling in Section 38, Block 1, same survey, and H. L. Holloway is drilling in Section 17, Block 35, H.&T.C. Survey, in the same general area.

First Pennsylvanian Oil

Gulf Production Co.'s No. 103 McElroy, in Section 197, Block F, Upton County, drilled to the world's record depth of 12,786 feet but plugged back after the Ellenburger lime, member of the Ordovician, failed to pay off, is swabbing more oil and less water after perforating the casing between 8,130-8,270 feet. It swabbed 155 bbls. of oil and 37 bbls. of water. The oil is the first from the Pennsylvanian in the West Texas district, and treatment of the lime with 3,000 gallons of acid apparently had good effect. If it fails to make a commercial producer from this depth casing will be perforated higher and another test made, this method to be used until the Permian lime, the pay lime in the McElroy Field in which the well is located, is reached. This lime is sure to produce in commercial quantities in the well.

Glasscock Ordovician Test

John I. Moore, Loffland Brothers and others' No. 1 McDowell, in Section 22, Block 34, Township 2s, T.&P. Survey, Glasscock County, is to be deepened from its present depth of 9,946 feet where it has been shut down for three months. Tool joints are being welded on the new pipe to prevent twist offs when carrying the test deeper. This test has had several good showings of oil, the last increase being logged at 9,594-9,600

"Balanced Buying" suggests

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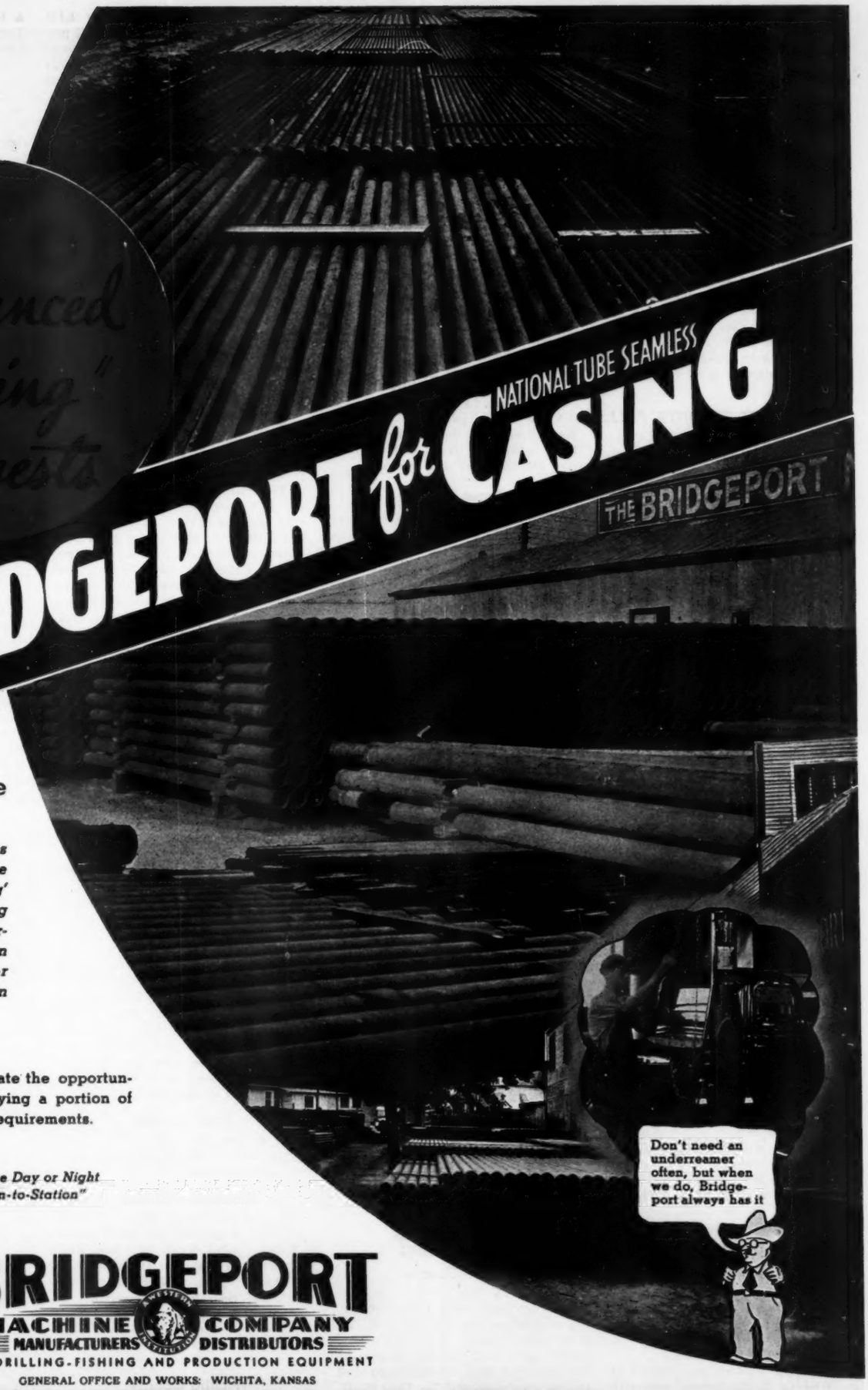

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AND OTHER BRANCH STORE POINTS

and 9,633-45 feet, making it an exceptionally interesting test.

Andrews County Failure

Wahlenmaier Petroleum Corp.'s No. 1 Odessa Ranch Co., in Section 10, Block A-32, 10 miles northwest of the Means Pool, Andrews County, is shut down at 4,807 feet, appearing a dry hole. It will probably be abandoned. Elevation is 3,307 feet.

There were 26 locations staked in the district this week with 11 tests completed.

Melrose Oil Co.'s No. 1 L. P. Wood, in the W. Holmes Survey, 4 miles southwest of the McMillan Pool, Runnels County, is to be carried to 3,500 feet as a result of a sale of a half interest and the 1,025-acre block around it to E. W. Stanfield of Los Angeles for a reported $15,000. It has been shut down at 2,507 feet for several months.

RANGER AND WICHITA FALLS

The feature in the Ranger district was the striking of oil in Pitzer and West's No. 1 De La Fosse, in the NE ¼ of Section 1,549, T.D.&L. Survey, about 5½ miles north of the old Ibex Pool, east of Albany, in Shackelford County. The oil, struck between 4,453 and 4,454 feet, is believed coming from the Ellenburger lime, a new producing horizon in the county, and the horizon from which deep wells in the Big Lake Field, Reagan County, are producing. Oil rose 2,500 feet in two and one-half hours and it made one flow of an estimated 25 bbls. in a head that went over the crown block. It was immediately shut in to place blowout prevention equipment on casing. Five-inch casing is to be run and tanks erected. There is more than 500 feet of open hole, the 6-inch casing being set at 3,924 feet.

This is an exceptionally important showing due to other fields in the county producing from shallow sands and this is the first deep producer. It is on a block of approximately 5,500 acres, Magnolia Petroleum Co. holding a quarter section. It will be at least 10 days or two weeks before casing is cemented and plug drilled. A possible deep discovery should lead to deep drilling in this and surrounding counties.

The Chalk Hill Pool, Archer County, registered another deep producer when Deep Oil Development Co.'s No. 2, Lease 4, L. F. Wilson, a west offset to the deep discovery, made 1,000 bbls. of oil from the canyon logged at 2,206-24 feet.

Rathke Oil Co.'s No. 1 Seddon, 7 miles southwest of Graham in Young County, logged a new pay horizon at 3,730 feet and started filling with oil. It is but a short distance south of the company's No. 1 Wadley producer, producing from a 4,300-foot lime, but did not pick up the 3,700-foot lime found in the Seddon test.

Perkins and Cullums' No. 183 Falls County, in Archer County, has been carried twice as deep as the producers in this area where shallow lime production is found around 1,100 feet. This test was abandoned at 2,500 feet without any showing below the regular lime pay zone.

There were 46 locations staked in the Wichita Falls district with 41 tests being completed.

Magnolia Petroleum Co. has started drilling on a 3,700-foot test in the SE cor. of the Lake McCrory farm, northwest of the Chalk Hill Pool, Archer County. It will try for production in the Canyon and Strawn lime zones. There are several Canyon producing wells in the area.

Runs in the district averaged 63,185 bbls. per day during the week.

WEST TEXAS COMPLETIONS

Ector County

Stanolind Oil & Gas Co.'s No. 18 J. M. Cowden, top pay 4,182 feet, total depth 4,215 feet, shot with 175 quarts from 4,175-4,215 feet, initial production 780 bbls. per day.

Fisher County

Russ Petroleum Co.'s No. 1 Reynolds, total depth 3,206 feet, dry and abandoned. Southern Oil Corp.'s No. 2-A Pardue, top pay 3,101 feet, total depth 3,119 feet, treated with 1,000 gallons of acid, initial production 43 bbls. per hour swabbing.

Howard County

Herschback Petroleum Co.'s No. 2-A Davis, top pay 2,487 feet, total depth 2,807 feet, shot with 800 quarts from 2,487-2,807 feet, initial production 116 bbls. per day pumping.

Jones County

Ungren and Frazier's No. 1-A King, top pay 1,975 feet, total depth 1,985 feet, initial production 422 bbls. in 12 hours flowing.

Loving County

A. R. Eppenauer's No. 2 Hammill and Ellis, top pay 4,257 feet, total depth 4,264 feet, plugged back to 4,262 feet, shot with 170 quarts from 4,220-62 feet, initial production 365 bbls. per day.

Upton County

Gulf Production Co.'s No. 113 J. T. McElroy, top pay 2,809 feet, total depth 2,995 feet, plugged back to 2,844 feet, shot with 280 quarts from 2,736-2,855 feet, initial production 30 bbls. of oil per day plus 10 per cent water; No. 114 J. T. McElroy, top pay 2,675 feet, total depth 2,877 feet, plugged back to 2,819 feet, shot with 300 quarts from 2,675-2,850 feet, initial production 292 bbls. per hour, potential gauge, flowing through 2½-inch tubing. International Petroleum Corp.'s No. 2-A H. L. McClintock, top pay 2,920 feet, total depth 3,030 feet, shot with 420 quarts from 2,929-3,030 feet, initial production 385 bbls. per day swabbing and flowing. Magnolia Petroleum Co.'s No. 3 Ed S. Hughes, top pay 2,293 feet, total depth 2,295 feet, treated with 1,000 gallons of acid, initial production 226 bbls. of oil plus 500 bbls. of water per day pumping.

Ward County

California Co.'s No. 32 Durgin, top pay 2,312 feet, total depth 2,547 feet, shot with 330 quarts from 2,311-2,531 feet, initial production 973 bbls. per day.

WICHITA FALLS COMPLETIONS

Archer County

L. T. Burns' No. 5 Albers, top pay 1,238 feet, total depth 1,254 feet, initial production 100 bbls. per day; No. 3 M. Kolb, top pay 1,235 feet, total depth 1,252 feet, initial production 100 bbls. per day. Consolidated and Petroleum Producers' No. 11-D W. H. Portwood, top pay 1,365 feet, total depth 1,374 feet, initial production 1,000 bbls. per day flowing; No. 12-D W. H. Portwood, top pay 1,375 feet, total depth 1,390 feet, initial production 275 bbls. per day. Continental Oil Co.'s No. 20-B Falls, top pay 1,111 feet, total depth 1,126 feet, initial production 38 bbls. per day pumping; No. 13-A W. J. Logan, top pay 1,124 feet, total depth 1,138½ feet, initial production 40 bbls. per day pumping. Cullum and Alexander's No. 35 Falls, top pay 1,120 feet, total depth 1,127 feet, initial production 22 bbls. of oil and 6 bbls. of water per day; No. 36 Falls, top pay 1,130 feet, total depth 1,137 feet, initial production 20 bbls. per day; No. 38 Falls, total depth 1,172 feet, dry and abandoned. Florey Oil Co.'s No. 5 F. Brazina and others, top pay 1,436 feet, total depth 1,440 feet, initial production 110 bbls. per day.

Grace and Woods' No. 1-A J. H. Turberville, top pay 2,830 feet, total depth 2,847 feet, initial production 25 bbls. per day. Gray Drilling Co.'s No. 1 Mankins estate, total depth 690 feet, dry and abandoned. Huggins Oil Co.'s No. 4 W. Ford, top pay 991 feet, total depth 1,003 feet, initial production 10 bbls. per day. Panhandle Refining Co.'s No. 7-F H. Prideaux, top pay 679 feet, total depth 722 feet, plugged back to 683 feet, completed as key well. Perkins and Cullum's No. 183 Falls, total depth 2,500 feet, dry and abandoned; No. 184 Falls, top pay 1,160 feet, total depth 1,184 feet, initial production 125 bbls. per day; No. 185 Falls, top pay 1,159 feet, total depth 1,180 feet, initial production estimated 100 bbls. per day. J. O. Rogers and others' No. 1 J. Kreeger, total depth 1,456 feet, dry and abandoned. H. Sackett and others' No. 1 G. P. Meade, total depth 1,314 feet, dry and abandoned. Steele and Scott's No. 2 J. R. Garvey, top pay 777 feet, total depth 786 feet, initial production 4 bbls. per hour pumping. Teague and Maddox' No. 1 J. D. Carpenter, total depth 915 feet, dry and abandoned. Underwood and Campbell's No. 10-B R. Campbell, total depth 1,065 feet, dry and abandoned. War-Tex Production Co.'s No. 1 E. Hausler, total depth 1,210 feet, dry and abandoned.

Clay County

R. J. Brown and others' No. 1 Sidney Webb, total depth 1,158 feet, dry and abandoned.

Cooke County

Merrick, Inc.'s No. 1 J. W. Hess, top pay 848 feet, total depth 864 feet, initial production 190 bbls. per day. F. W. Merrick, Inc.'s No. 3 G. A. Stelzer, top pay 798 feet, total depth 820 feet, initial production 10 bbls. per day. United Producers' No. 1 J. H. Cooke and others, total depth 1,654 feet, dry and abandoned.

Jack County

Worth Oil Co.'s No. 10 J. W. Maxey estate, total depth 468 feet, dry and abandoned.

Montague County

Pure Oil Co.'s No. 5 Mrs. F. E. Loy (old well deepened; old total depth 820 feet), total depth 912 feet, dry and abandoned. Raisen Brothers' No. 6 Hinton, top pay 780 feet, total depth 793 feet, initial production 2 bbls. of oil and 15 bbls. of water per day. Seitz Brothers and others' No. 1 C. A. Walling, total depth 2,509 feet, dry and abandoned.

Wichita County

Burk Royalty Co.'s No. 9 Allen and Kemp, total depth 846 feet, dry and abandoned. R. R. Clark and others' No. 39 Bickley estate, top pay 1,957 feet, total depth 1,971 feet, initial production 48 bbls. per day. Humble Oil & Refining Co.'s No. 1 Williams and Parker, total depth 2,070 feet, dry and abandoned.

Wilbarger County

E. P. Waggoner and C. F. Kolp's No. 4 Waggoner estate, top pay 790 feet, total depth 795 feet, initial production estimated 500,000 feet of gas per day.

Young County

J. W. Akin and W. L. Hawkins' No. 2 O. Deitrich, total depth 1,150 feet, dry and abandoned. L. T. Burns' No. 1 W. J. Logan estate, total depth 1,262 feet, dry and abandoned. N. D. Goldsmith's No. 3 J. R. Wilson, top pay 991 feet, total depth 994 feet, initial production 45 bbls. per day. L. G. Hawkins and others' No. 3 J. Kirkland, total depth 775 feet, dry and abandoned. Nash and Windfohr's No. 2 F. Rubenkoenig, total depth 3,385 feet, dry and abandoned. W. R. Stafford and others' No. 1 J. G. Hawkins and others, total depth 550 feet, dry and abandoned.

PANHANDLE COMPLETIONS

Carson County

Stanolind Oil & Gas Co.'s No. 3 Percival, top pay 3,232 feet, total depth 3,283 feet, initial production 145 bbls. per day, pumping.

Dallam County

Warner's No. 1 Jarboe, dry and abandoned 3,965 feet. Small show gas 1,168-1,500 feet, elevation 4,066 feet.

Gray County

Bradshaw Oil & Gas Co.'s No. 2 Sackett, top pay 3,215 feet, total depth 3,306 feet, shot 330 quarts from 3,214-3,304 feet, initial production 344 bbls. per day, pumping. Continental Oil Co.'s No. 10 Wright, top pay 2,819 feet, total depth 2,914 feet, initial production 324 bbls. per day on gas lift. King Royalty Co.'s No. 4 Thompson, top pay 3,220 feet, total depth 3,260 feet, shot 300 quarts from 3,183 feet, total depth 3,253 feet, initial production 341 bbls. per day, pumping. The Texas Co.'s No. 9 Davis, top pay 3,256 feet, total depth 3,310 feet, initial production 5 bbls. per day, pumping. The Texas Co.'s No. 16 Williams, top pay 3,675 feet, total depth 2,700 feet, initial production 511 bbls. per day. Southern Petroleum Exploration Co.'s No. 1 Archer, top pay 3,256 feet, total depth 3,310 feet, initial production 5 bbls. per day, pumping.

Hutchinson County

International Petroleum Co.'s No. 8 Lewis-Badger, top pay 2,960 feet, total depth 3,045 feet, shot 390 quarts from 2,955-3,040 feet, initial production 448 bbls. per day, pumping. Texilvania Oil Co.'s No. 1 Thompson, top pay 3,045 feet, plugged back to 2,992 feet, shot 100 quarts from 2,969-92 feet, initial production 37 bbls. oil and 30 bbls. water per day, pumping.

Wheeler County

Smith Brothers' No. 8 Harland, top pay 2,480 feet, total depth 2,520 feet, initial production 1,037 bbls. per day.

Tours Country With Diesel

C. L. Cummins, president of the Cummins Engine Co., has completed a transcontinental economy tour at Los Angeles this week using a Diesel-driven car. In a leisurely trip from New York City to Los Angeles, he covered 3,774 miles, averaging 34.62 miles per gallon of fuel.

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DEEP CADDO WELL IS OVER 5,000 BBLS.

By
J. R. CRUMPTON

SHREVEPORT, La., July 8.—United Gas Public Service Co.'s No. 1 Young, Section 21-23-16 in the Rodessa Field, northwestern Caddo Parish, La., was completed at 6,048 feet making an estimated 5,000 to 10,000 bbls. of oil and 40,000,000 feet of gas with 2,000 pounds rock pressure. The oil is of 40 gravity. This is the deepest oil production in North Louisiana and is coming from the Glenrose sand of the upper Trinity series. Rodessa has been producing highly saturated gas at a slightly shallower depth than the present test, this being the twenty-first well in the area.

North Louisiana had seven during the past week consisting of two small oil wells, two gassers and three dry holes. None of the numerous wildcats was on test, and there were no completions in Arkansas or Mississippi.

North Louisiana

In the northeast extension of the old Pine Island Field of Caddo Parish, La., Nick Babare's No. 1 Gibbs, Section 16-20-15, is pumping 20 bbls. from 2,265 feet, and in Section 12-20-16, Hillman and others' No. 1 Noel estate is a 15-bbl. pumper from 1,514 feet. In the Greenwood area of Caddo Parish, R. E. Davidson and others' No. 1 E. F. Wilkerson, Section 9-17-15, was dry and abandoned in the Nacatoch sand at 970 feet. The two gas wells were in two separate parishes of the old Monroe Field. In Morehouse Parish, Carbons Consolidated's No. 2 Archie, Section 22-20-4e, gauged 7,000,000 feet of dry gas from 2,135 feet. In the Union Parish area of the same field, W. B. Inabnett's No. 1 fee, Section 11-20-3e, was a 3,000,000 foot gasser from 2,177 feet. A wildcat in Red River Parish, Sterling Oil & Refining Co.'s No. 1 Long-Bell Lumber Co., Section 19-13-9w, was abandoned, salt water being found at 3,004 feet, and the hole plugged back to 1,175 feet. The other dry hole was in the southwestern part of Sabine Parish. Tex-La-Ark. Oil Co.'s No. 1 Pickering Lumber Co., Section 3-3n-12w, was dry and abandoned at 2,742 feet.

South of the town of Plain Dealing, Richplain Oil Co.'s No. 1 Gaines, Section 22-22-13, is arranging to set casing to test a reported core of 18 feet of sand cut from 2,822-40 feet. The test is an offset to an old well drilled about 20 years ago which made about 1,500 bbls. of oil daily for about three days, went dead and was never revived. Previous offsets to the original well failed to make any production. Another Bossier Parish test that is being watched with much interest is a flank well for upper Trinity gas production in the Sligo area. Triangle Drilling Co.'s No. 1 State of Louisiana, Section 23-17-12, had all the ear marks of being a good gasser on drill stem test during the past few days. Tested at 4,437 feet, the well made an estimated flow of 20,000,000 feet of gas and is the first well in this area to make a producer below the 4,300 foot level.

Other North Louisiana wildcats follow: Bossier Parish, Bossier Oil & Gas Co.'s No. 1 Sherrill, Section 13-18-12, drilling at 507 feet; W. A. Kirkland's No. 1 Jarrett & McKeller, Section 3-21-13, shut down for rig repairs at 2,450 feet; L. R. Skidmore's No. 1 Davis, Section 12-18-13, drilling at 1,792 feet; Caldwell Parish, Critchett & Woods' No. 1 Louisiana Central Lumber Co., Section 18-11-3e, arranging to set casing at 1,700 feet with the hole bottomed at 1,720 feet. Two other wildcats in this parish are temporarily shut down, G. C. Davis' No. 1 Louisiana Central Lumber Co., Section 14-11-3e, an old well drilling deeper from 1,850 feet and G. W. Zeigan and others' No. 1 Louisiana Central, Section 25-13-3e, shut down at 556 feet.

Estimated Daily Production

Estimated daily gross production all companies, week ending July 6:

NORTH LOUISIANA

	Bbls.
Bellevue	600
Caddo, light	4,955
Caddo, heavy	1,965
Converse	1,135
Cotton Valley	445
DeSoto and Red River	1,375
Elm Grove	415
Haynesville	3,450
Holly	145
Homer	2,690
Pleasant Hill	185
Sarepta-Carterville	650
Urania	3,000
Zwolle	1,665
Total	22,575

SOUTH ARKANSAS

Champagnolle	2,450
El Dorado	2,260
Lisbon	310
Miller County	1,515
Nevada	890
Smackover, light	2,285
Smackover, heavy	18,300
Stephens	630
Urbana	2,100
Total	30,740

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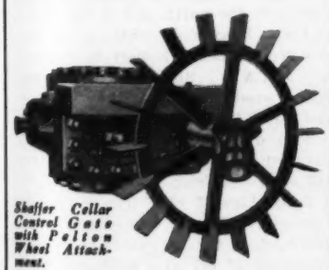

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Among Gulf Coast Drilling Contractors

Harrison & Dillard (Jim Harrison and Red Dillard) have one well nearing the pay at Hastings Field, Brazoria County, for the Stanolind Oil & Gas Co., and are preparing to spud a second well for the company in the field.

George Echols has set 4,054 feet of 7-inch casing on a north outpost well for the Uscan Oil Co. in the Manvel Field. This well tested 950 feet of oil from the Miocene on a 10-minute test. Mr. Echols is drilling below 4,000 feet on a test for the Quintana Petroleum Corp. at Nash Dome; has started on a new location for the Houston Oil Co. in East Texas; has set surface pipe for the Shell Petroleum Corp. at Tomball; and has several new locations to be announced in the next several days.

Carlisle & Williams have set 950 feet of surface pipe on a well for F. C. Dodson in Brewster County, carried as Texas American Syndicate's No. 1.

B. J. (Bert) Smith is drilling a 5,500-foot test for R. G. Burk 6 miles south of Yoakum in DeWitt County.

W. V. (Bill) Bowles is drilling No. 2 Morrison for the Texas Co. in the Manvel Field, Brazoria County.

Rutherford Drilling Co. set and cemented 7,085 feet of 9⅝-inch casing in No. 3-B Cobb, in the Van Vleck Field, for the Skelly Oil Co., and is now drilling at 7,108 feet.

San Patricio Drilling Co. is rigging up to drill a well for the Skelly Oil Co. in the Cayuga Field.

Jordan Drilling Co. is rigging up to drill a well between the town of Goodrick and the Livingston Field, Polk County. Same contractor has one rig running for Boone Brothers in the Kittrell Field, Houston County.

Anderson, Kerr & DeArman have completed rigging and will kill the well recently completed in the Pierce Junction Field by Hamill & Smith preparatory to fishing for drill stem, through which the well produced 14,000 bbls. of oil before it sanded up. Drill stem will be backed off as deep as possible, and hole sidetracked if necessary.

Jeff Hooper tested salt water at 6,450 feet on a wildcat for H. B. Herbert and J. J. Still near Cypress in Harris County. The test will be carried to contract depth of 6,600 feet. Hooper is setting screen in a well at Coleta Creek, Victoria County, for the Trans-State Oil Co., 9 feet of oil and gas sand having been cored.

One of the most ticklish jobs now in progress on the Gulf Coast is Helmrich & Payne's No. 1 Hawkins on the Shepherd's Mott prospect, Matagorda County. Heaving shale has proved the nemesis of many a previous well on this famous dome, originally located by geophysical survey for H. C. Cockburn. Members of the crew shown above, however, do not appear to be worried over their chances of getting through this time, as they are equipped with a double-drawworks rig, a scientifically laid out mud circulating system presided over constantly by Ted Evans of the Colox staff of mud engineers who, incidentally, succeeded in getting the last previous well through the shale despite handicaps which eventuated at the last minute in stuck casing. Reading from left to right the men are: J. L. Watts, driller; George Standard, derrick man; O. C. Head, Jack Sorrells and J. L. Pollard, helpers. Fred Reading, of Reading & Bates, drilling contractors, is in charge of drilling operations.

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SECOND PRODUCING HORIZON AT PLACEDO FIELD, VICTORIA

By
F. L. SINGLETON

HOUSTON, Tex., July 8.—The Placedo Field in Victoria County received its second producing horizon when two tests were completed in a shallow sand for commercial producers. L. A. Gillespie and Superior Oil & Gas Co.'s No. 1 John Janis, a west offset to the discovery, topped the sand at 4,746 feet and was completed at a total depth of 4,756 feet for an initial production of 201 bbls. per day through a one-quarter inch choke with tubing pressure 250 pounds and casing pressure 825 pounds. Seven-inch casing was cemented at 4,737 feet. E. L. Smith Oil Co.'s No. 1 Henderson and Pickering, the most southwesterly test from the discovery in the J. M. Bronson Survey, was completed at a plugged depth of 4,777 feet for an initial production of 160 bbls. per day through a three-sixteenths inch choke, with tubing pressure 160 pounds and casing pressure 385 pounds. Seven-inch casing was cemented at 4,770 feet. Production is coming from the Heterostegina zone, approximately 1,200 feet higher than the producing horizon found in the discovery well producing from the base of the Frio at approximately 6,000 feet.

L. A. Gillespie and others' No. 1 R. W. Brandl, an offset to the discovery, cored salt water sand in the discovery horizon at 6,255 feet, and is plugging back to set a whipstock and sidetrack at 4,030 feet to test the shallow sand. Another failure looms for the deep pay in Magnolia Petroleum Co.'s No. 1 Henderson and Pickering which is coring in shale below 6,390 feet.

Hastings

Another important extension has apparently been made in the Hastings Field, Brazoria County, due to the showing made by Stanolind Oil & Gas Co.'s No. 1 Hutchinson about 2,000 feet southwest of the company's No. 1 Steven Paul in the south end of the field, and the first test to be drilled west of production. It topped sand showing oil at 5,764 feet and is shut down waiting orders at a total depth of 5,924 feet. The interesting feature is that it is 210 feet structurally higher than the Paul producer, the highest well in the field, being over 500 feet higher than the discovery. A production test was being made on the company's No. 1 Ford, 2,000 feet north of production in the A.C.H.&B. Survey. It topped the oil sand at 6,112 feet and is testing in oil sand at a total depth of 6,124 feet. Seven-inch casing was cemented at 6,108 feet.

Anahuac

In the Anahuac Field, northern Chambers County, Humble Oil & Refining Co.'s No. 2 Clark in Section 57, H.&T.C. Survey, marked another extension when completed at a total depth of 7,095 feet for a initial production of 29 bbls. per hour through a one-quarter inch choke with tubing pressure 1,125 pounds and casing pressure 1,200 pounds. The oil sand was topped at 7,045 feet. Marginulina at 6,606 feet, Heterostegina at 6,269 feet and Discorbis at 6,050 feet. It is northwest of No. 1 Clark and based on the Marginulina is a few feet structurally higher.

Bryan Mound

At the Bryan Mound prospect, in the extreme southeastern part of Brazoria County, Texas Co. is preparing to test No. 1 Freeport Sulphur Co. in the S. F. Austin Survey, after an electrical coring test showed possibilities of production from 3,415-50 feet. It was originally drilled to 4,544 feet where it encountered heaving shale and is plugged back to 3,969 feet and will test the Miocene sand through perforated casing from 3,400-15 feet.

Orchard

In the Orchard Field, Fort Bend County, Gulf Production Co.'s No. 43 Moore is being tested in a deep sand bottomed at 6,652 feet. Sand showing oil was encountered at 6,581 feet and 7-inch casing was cemented at 6,584 feet. If the test is productive it will open the fourth producing sand in the field, as production is being produced from approximately 2,500, 3,700 and 4,100 feet. It is in the E.M. &G. Survey.

Vanderbilt

Phillips Petroleum Co. has made location for its No. 2 Toney in the Vanderbilt Field in Jackson County, 330 feet each way out of the east corner of a 64-acre lease, being 414 feet southeast of its No. 1 Toney, discovery well in the R. Musquiz Survey. In the same county, but in the Midfield area, Shell Petroleum Corp. has made location for a second wildcat, No. 1 Combs, 466 feet east of the west line and 2,500 feet north of the south line of a 242.75-acre tract in Section 33 of the M.&C. Survey.

Wharton

The outcome of a second production test on Texas Co.'s No. 2-A Pierce estate, the discovery well of a field in the central part of Wharton County, was being awaited over the week end. After proving the structure productive last week when it flowed 12 bbls. of pipe line oil per hour from a total depth of 4,705 feet, it was cored to 4,710 feet and was being tested late in the week through perforated casing from 4,690-4,710 feet. It is in the I.&G.N. Survey No. 39.

South Houston

The discovery well of the South Houston district, Stanolind Oil & Gas Co.'s No. 1 fee, in the H.T.&B. Survey No. 5, Harris County, has been recompleted and on the first 24-hour gauge it flowed 166 bbls. per day on a one-quarter and a five-sixteenths inch choke, with tubing pressure 600 pounds. It is producing from the Miocene sand at a plugged back depth of 4,685 feet. The company made its fifth location, No. 1 First National Bank of Houston, 950 feet from the northeast line and 990 feet from the southeast line of a 119.6-acre tract in the Callahan and Vince Survey. It is north of the discovery and the first location outside of the South Houston townsite.

Ogburn

In the western part of the county, on the Ogburn prospect, another failure has been marked up. J. E. Hooper and others' No. 1 Backen tested approximately 1,200 feet of salt water on 17-minute drill stem test from 6,416-48 feet, through a one-quarter inch choke. The test was made after about 200 feet of the Cockfield sand had been encountered. Top of the Cockfield was topped at 6,240 feet. The operators will probably core to the contract depth and abandon the well. It is 330 feet out of the southwest corner of the J. C. Ogburn Survey.

Port Lavaca

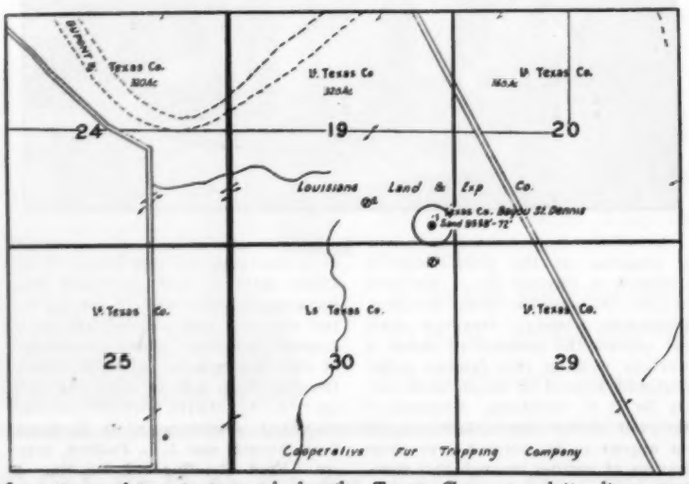
One more producer was added to the Port Lavaca Field in Calhoun County by the completion of Halliburton Oil Producing Co.'s No. 2 Dave Burton in sand bottomed at 6,238 feet for an initial production of 176 bbls. per day through a 12/64-inch choke with tubing pressure 750 pounds and casing pressure 1,250 pounds. It is a south offset to the company's No. 1 Burton in the M. Sanches Survey. Northwest of Texas Co.'s No. 1 Wehmeyer, on the west side, Empire Gas & Fuel Co. is preparing to make a second drill stem test on No. 1 Hartman after the seat failed to hold. Very little saturated sand is reported encountered in cores taken below 6,200 feet, although it tested 375 pounds of pressure on a drill stem test in the distillate sand at 6,190 feet which overlies the oil sand. Texas Co. was preparing to test No. 1 Shofner after perforating the casing from 6,222-30 feet with 29 holes. Same company's No. 1 L. D. Hackney, an outpost in the B. Rodriquez Survey, west of production about 4 miles, is reaming in shale with new shows below 6,136 feet.

Manvel

Offsetting the deep Oligocene production in the north end of the Manvel Field, Brazoria County, Uscan Oil Co.'s No. 1 Nancy Ebbert in Section 23, H.T.&B. Survey, apparently opened production from the Miocene sand when it showed considerable oil on two drill stem tests. It is bottomed at 4,085 feet and on the first drill stem test from 4,054-75 feet tested 5 fourbles of oil with 20 pounds of pressure. On the second test from 4,054-85 feet, the operators recovered 6 fourbles of oil with a slight show of salt water. It is the general opinion the test proves the existence of a fault between it and the west boundary line of Bowles and Borsodi's lease, as the sand is the same horizon encountered in the Bowles and Borsodi producers at approximately 3,642-50 feet which carried gas.

Coleto Creek

Northwest of the main producing section of the Coleto Creek Field in Victoria County, Trans State Oil Co.'s No. 1 Kastner, in the R. Manchola Survey, cored soft oil sand from 2,828-32 feet, the total depth, and on an eight-minute drill stem test from



Locations of two tests made by the Texas Co. around its discovery well in the Bayou St. Dennis Field, Jefferson Parish, Louisiana

2,820-32 feet it showed 525 pounds of pressure and 80 feet of mud, with a slight show of oil. Casing will be cemented at the bottom of the hole and a production test made through perforated casing.

Liberty County

In the central part of Liberty County, J. W. Frazier and others' No. 1 Lynott and Buffum is plugged back to 7,550 feet and is preparing to sidetrack to redrill to 7,665 feet and core from that depth to 7,681 feet, which showed sand with possibilities of production on an electrical coring test. It is in the J. Robeson Survey. It was originally drilled to 7,851 feet, and based on geological markers it is several hundred feet lower than the operators' first test which was abandoned.

LOUISIANA

The deep test of Shell Petroleum Corp.'s No. 1 Jarnigan, which has established itself as the deepest well ever to be drilled on the Gulf Coast, continues to be the center of interest in Coastal Louisiana. It is in the Roanoke Field in Jefferson Davis Parish. It failed to pick up the 10,000-foot sand that attempted to blow out several weeks ago, which stuck the drill stem, causing the operators to plug back, sidetrack and redrill a new hole. As the hole may be carried several feet off vertical due to the sidetracking job, the sand will probably be encountered several feet deeper. A core was taken from 10,011-15 feet and the operators recovered 3 feet, top 2½ feet was shale and bottom 6 inches was hard shaley sand with no shows of oil or gas. It is coring in sandy shale below 10,018 feet. Location is in Section 12-9s-4w.

In the Bayou St. Dennis Field, Jefferson Parish, discovered a few weeks ago by Texas Co. when it marked up the deepest producing record for the coast by the completion of No. 1 Bayou St. Dennis at 9,572 feet, the company has made two more locations and have begun actual drilling operations. No. 2 Bayou St. Lennis is 466 feet north, 1,194 feet west of the SE cor. of Section 19-17s-24e, and is drilling below 1,700 feet in shale. It is west of the discovery well. South of the discovery, No. 1 Rigelet is 150 feet west and 230 feet south of the NE cor. of Section 30-17s-24e, and it is drilling below 1,910 feet in shale.

South of Fohs Oil Co.'s production in the Gillis Field, Calcasieu Parish, the company has apparently extended the producing limits about 600 feet, due to the showing made by its No. 1 Wasey, which tested 350 pounds of pressure, and blew oil through the drill stem through a one-quarter inch choke on bottom and a five-sixteenths inch choke. The test lasted 12 minutes and was made from 7,052-65 feet, the total depth. Seven-inch casing will be cemented at the top of the sand.

Bosco

The southeastern limits of the Bosco Field in Acadia and St. Landry Parishes have apparently been defined by the showing of Superior Oil Producing Co.'s No. 1 E. Arceneaux in Section 35-8s-3e, which showed nothing but salt water with a slight trace of oil when tested at a total depth of 8,670 feet. The company's No. 2 Domingue, in Section 34-8s-3e, extended production 1,000 feet north when it made 226 bbls. of pipe line oil through a 9/64-inch choke, with tubing pressure 824 pounds and casing pressure 1,150 pounds. Seven-inch casing was cemented at 8,520 feet, with the bottom of the hole at 8,610 feet.

T. B. Gregory Advanced

T. B. Gregory, vice president of the Lone Star Gas Corp., Dallas, Tex., and pioneer of the natural gas industry in the United States, recently was elected president of the board to succeed the late George W. Crawford.

Rocky Mountain Runs

Estimated daily average production for the week ending July 6 follows:

	Bbls.
WYOMING	
Salt Creek	17,070
Big Muddy	1,680
Badger Basin	30
Black Mountain	280
Byron	840
Dallas Derby	590
Dutton Creek	70
Elk Basin	20
Ferris	10
Frannie	380
Garland	860
Grass Creek	4,840
Hamilton Dome	1,820
Hudson	280
LaBarge	1,210
Lance Creek	1,170
Lost Soldier	1,690
Mule Creek	Shut in
Midway	80
Notches	Shut in
Oregon Basin	3,540
Osage	660
Pilot Butte	30
Rex Lake	Shut in
Rock River	1,580
South Casper	550
Poison Spider	190
Teapot	20
Waugh Dome	300
Total Wyoming	39,790
MONTANA	
Buckley-Border	320
Cat Creek	850
Cut Bank	5,200
Kevin-Sunburst	3,400
Lake Basin	50
Pondera	1,620
Total Montana	11,440
COLORADO	
Florence	220
Fort Collins and Wellington	430
Iles Dome	2,770
Moffat	400
Orchard	80
Rangely	70
Tow Creek	150
Total Colorado	4,120
NEW MEXICO	
Artesia	600
Cooper	5,500
Eunice area	7,600
Hobbs	31,400
Hogback	150
Jal	4,000
Lea area	1,500
Maljamar	1,500
Rattlesnake	580
Table Mesa	90
Total New Mexico	52,920
Total Rocky Mountain region	108,270

TOP—G-E explosion-proof motors direct-connected to pumps in outdoor refinery

BOTTOM—Modern oil refinery, showing G-E explosion-proof motors in solvent plant

YOU can save money and obtain safer, more dependable service by standardizing G-E explosion-proof motors built for Class I, Group D, hazardous gas locations.

Since the early pioneering of the explosion-proof motor by General Electric, much has been done to improve the design, both electrically and mechanically. There are now explosion-proof motors, in ratings up to 250 hp., for every application where this type of apparatus is required. With control to match, you can now obtain "tailor-made" motors and control for every requirement.

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011-60

GENERAL ELECTRIC

Eastern Field Report

By STAFF CORRESPONDENT

SOUTHWEST PENNSYLVANIA WELL EXTENDS PRODUCTION

PITTSBURGH, Pa., July 8.—There were 17 completions and five dry holes in the lower eastern fields during the week. Three were gas wells and 14 were producers with an initial production of 142 bbls. Southeast Ohio led in new production although there were two producers in Southwest Pennsylvania one of which extends production about 1 mile.

SOUTHWEST PENNSYLVANIA

Two producers were completed in Southwest Pennsylvania during the week. In Amwell Township, F. K. Fawcett and others extended territory by completing a fair producer on the Tucker heirs farm about a half mile south of their fair well on the J. C. and Anne Phelan farm, Washington County. The Pittsburgh Coal was at 630 feet; the top of the Fifth sand was at 2,875 feet with oil and gas showing at 2,882 feet. More oil showed at 2,885 feet and it filled up the 6⅝-inch casing 1,100 feet in 14 hours. A second pay is expected and it has the appearance of a 15-bbl. producer.

In this township and near the beginning of the pool, Raymond Orrill and others completed No. 5 on the G. L. Walker farm. Here the Pittsburgh Coal was 604 feet and the top of the Fifth sand 2,874 feet. Oil showed at 2,881 feet and 2,885 feet and it filled up the 5⅛-inch casing 2,000 feet in nine hours. It will be good for about 25 bbls. a day.

SOUTHEAST OHIO

In Jefferson County, Niagara Oil Corp. completed No. 8 on the John Morrison heirs farm, NW Section 16, Island Creek Township, in the Berea sand at 1,500 feet. It produced 2 bbls. the first day after shot and is in well defined territory.

In Guernsey County, E. C. Quillan and others completed a test on the Verna A. Quillan farm, Section 10, Wheeling Township, in the Niagara lime at 3,458 feet. It produced 20 bbls. the first day after shot.

In Knox County the test of Preston Oil Co. on the Selora Phillips farm in Section 20, Butler Township, which came in producing 18 bbls. natural with 750,000 feet of gas, was shot. The gas volume was not helped but production was increased to 45 bbls. a day. In Clay Township, Sterling C. Brown and others completed a test on the Cleve Van Winkle farm in Section 14, in the Berea sand good for 5 bbls. a day after shot.

In Medina County, E. R. Edson & Son Co. completed No. 61 on the Edward G. Miller farm, Tract 15, Lot 12, Chatham Township, in the Berea grit at a depth of 492 feet. It produced 5 bbls. the first day after shot. In the same township, Tract 1, Lot 3, these operators drilled No. 30 on the W. H. Wideman farm through the Berea grit to 522 feet. It was dry.

In Monroe County and NW Section 11, Bethel Township, Hayes Brothers and others drilled a test on the William Martin farm through the Squaw sand to 1,660 feet, all formations dry.

In Washington County, Chesmar Oil & Gas Co. completed a test on the Earl White farm, SW Section 2, Wesley Township, in the Maxon sand at a depth of 1,192 feet. It produced 2 bbls. the first day natural which increased to 3 bbls. after shot along with about 25,000 feet of gas. In the NW Section 27, Newport Township, George Pickens and others completed No. 11 on the Alvin Adkins farm in the First Cow Run sand at 421 feet. It had a small showing of oil natural which increased to 4 bbls. after shot.

In Vinton County, near Bollins Mills in Section 35, Knox Township, Co-operative Oil Co. completed a test on the Howard Stanley farm in the Berea grit at a depth of 1,077 feet. It produced 5 bbls. the first day.

WEST VIRGINIA

There were four small producers completed in West Virginia. In Marion County, the Philadelphia Oil Co. drilled deeper No. 1 on the R. F. Wood farm in Lincoln district from the Stray sand down to the Gordon sand from which it is producing about 7 bbls. a day.

In Mingo County, Spaulding, Brown & Floyd drilled No. 5 on the W. R. Spaulding farm in Harvey district on the waters of Jacks Fork of Turkey Creek deeper from the Gas sand to the Maxon sand, a total depth of 1,260 feet. It is making 1 bbl. a day.

In Pleasants County, J. W. Ruckman and others completed a test on the D. R. Westbrook farm in Grant district in the Second Salt sand at a depth of 551 feet. It will make a half barrel pumper.

In Roane County, Justin C. Cottle and others deepened No. 1 on the W. A. Davis farm on Peniel Run in Curtis district from the upper or gas part of the Salt sand to the second or oil pay. It is producing about 4 bbls. a day.

Gas Wells

In Cabell County, R. H. Adkins and others completed the test on the Benjamin Bledsoe farm in McComas district at a total depth of 3,989 feet. The Big Lime was at 1,683-1,845 feet and the Big Injun sand at 1,912-80 feet. The Berea sand was at 2,455-69 feet and the Brown shale extended from 3,264 feet to the bottom of the hole. About 125,000 feet of gas showed at 3,264-84 feet.

In the same district, R. H. Adkins and others completed No. 3 on the H. S. Fraley farm at a total depth of 1,337 feet. The Big Lime here was at 1,103-1,273 feet and the Big Injun at 1,330-37 feet with about 148,000 feet of gas showing at 1,335-37 feet.

In Roane County, Spencer Natural Gas Co. completed the test on the J. D. Young farm in Smithfield district at a total depth of 2,191 feet, the Big Lime. It has about 250,000 feet of gas a day, natural. In Curtis district, about 1½ miles east of McIntosh & Norman's No. 1 producer, R. R. Carpenter and others drilled a test on the L. C. Burdette farm through the Salt sand to 1,734 feet. It has about a quarter of a barrel a day showing, natural, and may be considered dry.

There were two other dry holes in West Virginia. In Clay district, Wirt County, Peter Silman drilled a second test on his own property through the Cow Run sand and it was dry.

In Central district, Doddridge County, L. L. Shinn drilled a test on the J. R. Hiley farm on Arnolds Creek through the Big Injun sand to 2,138 feet. It was also dry.

In Elk district, this company is down 2,600 feet on the G. and D. Copenhaver farm. Yoak Oil & Gas Co. has reached 4,692 feet, the Corniferous lime, on the W. T. and J. H. Goshorn farm. Benedum & Trees are down 4,614 feet on the Mary C. Wingfield farm.

In Jefferson district, Benedum & Trees are drilling deeper the deep test on the Joseph Hill farm after recovering the tools lost. The present depth is 5,380 feet or several hundred feet below the Oriskany sand.

Other West Virginia Drilling

In Boone County, Owens Illinois Glass Co. is rigging up on the V. G. Vandelinde farm in Scott district. Its No. 3 on the S. M. Wheeler farm is drilling at 865 feet. In Washington district, O. B. Cunningham and others are drilling at 425 feet on the Dollie Workman farm. Pond Fork Oil & Gas Co. is down 1,025 feet on the Cole and Crane lease, No. 21. In Sherman district, Pure Oil Co. is grading a road to a location for No. 75 on the Federal Coal Co. lease. Its No. 74 is drilling at 1,517 feet, and there is a location for No. 262 on the Williams Coal Co. lease.

In Cabell County, there were no new completions and only two wells drilling. In Guyandotte district, the Merrits Creek Coal Co. has reached 1,600 feet on the Charles Everett farm. In McComas district, West Virginia Gas Co. is down 1,020 feet on the George W. Savage farm.

In Calhoun County, Everett Starcher and others are drilling at 2,125 feet on the C. C. Starcher farm in Lee district. In Washington district, Earl Knotts has completed rig on the H. H. Bennington farm. In Sherman district, no wells are drilling. In Center district, A. H. Jackson has rigged up on the E. R. Fluharty farm.

In Gilmer County, J. W. Cunningham and others have started drilling on the Lee and Ola Gainer farm in DeKalb district. A. E. Ellis and others are down 1,400 feet on the C. C. Pickens farm and McCall Drilling Co. has reached 1,480 feet on the G. W. Wigner farm. In Center district, Park Bowser is rigging up No. 10 on the Dora E. Ramsburg farm. Starcher & Richards have rigged up on the E. Paul Ritchea farm. Grant Fowler and others are down 1,650 feet on the Nora V. Roberts farm. Hope Construction & Refining Co. is rigging up the K. C. Simmons farm.

In Lincoln County, United Fuel Gas Co. is spudding on the Vincent Dailey farm in Carroll district. In Sheridan district, H. A. Waggoner, trustee, is down 120 feet on the Nettie May farm. Pauley & Pridemore have reached 1,900 feet on the Minnie Adkins farm in Union district. In Logan County, Boone County Coal Co. is drilling at 1,504 feet on its own property.

In Marion County, Victor E. Tennant has completed rig on the J. T. Talkington farm in Lincoln district. In Paw Paw district, Owens Illinois Glass Co. has reached 2,929 feet on the A. T. Heck farm.

In Marshall district, the Cameron Light & Heat Co. is down 2,540 feet on the W. R. Hughes farm. In Monongalia County, Carnegie Natural Gas Co. is spudding on the C. H. Brand farm and has reached 1,590 feet on the Katherine Cook farm and shut down for casing.

In Raleigh County, Godfrey L. Cabot, Inc., is spudding No. 9 on the Beaver Coal Co. lease in Slab Fork district and has reached 1,800 feet in No. 8, same farm.

In Ritchie County, W. H. Mosser and others have a rig for a second test on the B. F. Fleming farm in Murphy district. Clem S. Morris has a rig standing on the Joseph Mathers farm. Samuel Summers and others has rigged up on the Minnie Jones heirs farm. George Eagan has a rig up on the B. F. Welch farm. L. P. Bickel has a rig on the P. W. Morris farm. All are in Murphy district. In Clay district, Glen McBurney and others have a rig standing on the D. L. Parker farm and Mahone and others one on the Thomas Murray farm. In Union district, W. A. Bickerstaff reached 1,200 feet on the Lakin Prichard farm and shut down. L. P. Bickel is down 1,750 feet on the E. Hendershot farm in the same district.

In Roane County, Harry Anderson and others have a location on the C. J. Kelly farm, Curtis district. H. H. Staats is down 700 feet on the R. R. Petty farm. Clyde W. Campbell has reached 1,135 feet on the L. D. Gandee farm. McIntosh & Norman are down 765 feet on their own property, No. 2. In Smithfield district, Guy Boggess and others are at 1,800 feet on the Anderson Boggs farm.

California Field Report

EASTERN MONTEBELLO FIELD LOOKING GOOD AT PRESENT

By
L. P. STOCKMAN

LOS ANGELES, Calif., July 8.—The eastern end of the Montebello Field, or what may ultimately prove an eastern extension of the field or another separate field, looks good at present, but it will be another few weeks before anything tangible appears. Despite development of production by the Universal Consolidated on the Nutt and Cruz leases there is a disparity of opinion regarding the potentiality of this new area. Some believe subsequent drilling will reveal a normal anticlinal structure, while others are of the opinion it will be a case of the oil being trapped in certain sections of the area by faults and cross faults. There is no surface evidence of structure.

The Woodward Oil Co. focussed the attention of operators on the eastern extension of the Montebello Field of Los Angeles Basin by coring an excellent oil sand in the Miocene at 3,180 feet. Incidentally, it is generally agreed that the Miocene appears to be rising toward the east. A formation tester run in the Woodward well showed the presence of an oil testing approximately 30 degrees and preparations were being made to land a string of casing to make an early production test. The Texas Co.'s test in this district is one of the most important wells being drilled because it is located between Universal Consolidated's No. 2 Nutt, a producer, and the Woodward project, which is in the extreme eastern end of the area. The showings found in the Woodward well resulted in a scramble to secure protective acreage, and while some additional acreage changed hands the play was disappointing because most of the potentially productive land was tied up before Woodward began work. The Camino Co., Ltd., has staked location for a well in Section 9-2-11, and Universal Consolidated is making plans to start one on Estrada property and another on the Farmer lease.

Playa Del Rey

Two fairly good wells were finished in the Palisades section of the Playa Del Rey Field of Los Angeles Basin this week and a check indicates the probability that several more potential producers will be tanking oil within a fortnight. Big Ben Oil Co. completed No. 2 Del Rey early this week, brought in flowing 2,731 bbls. of clean 22.3 gravity oil and a little over 1,000,000 feet of gas per day following completion at 6,629 feet. This well was cemented through perforations at 6,220 feet. Lor Mar Oil Co.'s No. 1 Palisades failed to show sufficient kick to result in a natural flow and it was put on the beam at 6,736 feet after the hole had been plugged back from 6,874 feet. It was completed pumping 314 bbls. of clean 23.4 gravity oil but may show an increase in production as the output seems to be building up. This new well was finished with 90 feet of 4¾-inch liner, all of which was perforated.

Operators interested in the future of the Palisades section of the Playa Del Rey Field are anxiously watching the outcome of the Allied Petroleum's test in the extreme southeastern end of the district. If this well should result in substantial production, it is probable another 15 wells will be drilled within a very short time. The Allied's test topped the Nodular shale at 6,426 feet and on this basis looks rather promising.

Mountain View

The Sovereign Oil Co. finished a fairly good well in the Mountain View Field of Kern County a few days ago when No. 4 S. J. D. was brought in flowing 1,440 bbls. of clean 32.5 gravity oil per day from 6,177 feet. This new well, finished with a string of 6⅝-inch landed and cemented at 6,050 feet and a 4¾-inch liner carrying 134 feet of perforated, is making 800,000 feet of gas along with the oil. Hancock Oil Co.'s No. 7 Miller, finished last week, registered a maximum potential on a short test of 11,307 bbls. per day. It has been beaned back to about 300 bbls. per day in conformity with the curtailment program. There are several wells scheduled for early completion in this field and at the present rate of development it is probable that at least five additional producers will be finished before the close of July.

The A. T. Jergins Trust added another well to its list of producers in the Edison Field of Kern County when No. 2 Smithwick, Section 24-30-29, was brought in pumping 250 bbls. per day following completion at 1,048 feet. This well was originally drilled to 1,175 feet but was plugged back to the completion depth because of bottom water. This producer was finished with an 8⅝-inch liner including 300 feet of perforated. The oil tests 16.4 degrees and shows a cut of 4 per cent which may, however, clean up after the well has been on production for a few days longer.

Tejon Area

Reserve Oil & Gas Co., by finishing No. 1 Tejon in the Wheeler Ridge-Tejon area in the extreme southern end of the San Joaquin Basin, may have completed the first well in a new field. It is still too early to venture an opinion as to the potentiality of this new area as the initial well was good for only 63 bbls. of 16.7 gravity oil per day from 2,699 feet with a 6⅝-inch water string landed and cemented at 2,664 feet, which gives the well 35 feet of formation from which to produce. The company is drilling a second well in this area in Section 12-10-19, which may shed some light on what this district may have to offer from a production standpoint. Several dusters have been drilled in the general locality, but none of them condemns the new area. In Section 7-10-19, the Silver Gate Oil Co. is making hole in a test at 1,200 feet, and this well may also prove of importance to this district.

The Shell Oil Co. completed No. 3 Mathews in the Mount Poso Field of Kern County, showing an initial daily production of 580 bbls. of clean 16.4 gravity oil from 1,580 feet with the water string landed and cemented at 1,536 feet. The Shell has staked location for three new wells in this field, and these, together with four additional wells to be drilled by Union, make it rather certain that Mount Poso will be active during the next 60 days. The Texas Co. got a good well upon completion of No. 5 Glide, which showed an initial of 632 bbls. of clean 16.5 gravity oil per day from 1,713 feet after the hole had been finished with an 8⅝-inch liner including 51 feet of perforated. O. F. W. Oil Co.'s No. 1 Poso was given a preliminary production test early in the week, and while it made 140 bbls. during the first 14 hours it sanded up and will have to be cleaned out before being put back on the beam.

Delano

Trico Oil & Gas Co. completed another well in the Delano gas field of Kern County when No. 5 Delano was brought in flowing 4,350,000 feet of dry gas per day from 2,467 feet. This test was inconclusive and the output may therefore show a much larger production after it has had a chance to clean itself out. The Delano gas field is not as active as Semi-Tropic, but is nevertheless showing a consistent rate of development. Several potential gas wells are nearing completion in the Semi-Tropic gas field of Kern County and some will begin producing within 10 days. Most of these wells are shut in immediately following completion and hence it may be several months before this field comes into commercial production. The Standard Oil Co. has been especially aggressive at Semi-Tropic and the Fullerton Oil Co., which owns several hundred acres in fee, is not much behind.

Elwood

Caroline Spalding chalked up an excellent completion in the Elwood Field of Santa Barbara County when No. 10 on state tideland permit No. 93 was brought in flowing 4,210 bbls. of relatively clean 35.8 gravity oil per day from the Vaqueros or upper zone at 3,760 feet. This is one of the best wells finished in the Elwood Field in a long time. The Property Service Corp.'s outpost in the Ventura Avenue, originally started by Associated Oil Co. but later taken over by the Shell Oil Co. and being drilled on a contractual basis for Ralph B. Lloyd, has reached 8,350 feet and is making hole in a relatively hard gray sand. This field has not received much attention during the past few months

—Map courtesy Seaboard Engineering Co., Los Angeles.

Map showing east extension of the Montebello Field

Straighten Out... those CROOKED Holes with SPERRY - SUN Well-Surveying Instruments

Well!

one Kept Straight with the H - K (Hewitt) (Kuster) Clinograph

The H-K Clinograph (designed for open holes only) lowered on a sand or bailing line at a speed ranging from 400 to 800 feet per minute, makes available permanent, accurate photographic records on paper discs of inclination and direction within five minutes after removing instrument from hole. (U. S. Patent 1,812,994 and others pending.)

Anchoring bottom plug nose to instrument.

Well!

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The SURWEL is a gyroscopic Clinograph which provides a map of the well at all depths prepared from actual photographic records. Unaffected by *Tortuosity* or *Magnetic Influence*. Self-checking—produces duplicate records going in and coming out. U. S. Patents 1,124,068, 1,812,994, 1,959,141, 1,960,038 and others pending).

Reading the Photograph story just told by a SURWEL run.

Well!

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The SYFO can be used on a wire line or as a "Go-Devil" running inside the drill stem or on sand or bailing line in open hole. It affords a quick inexpensive daily record on paper of vertical deviation in drilling—*without* the use of dangerous acids. (U. S. Patent 1,962,634 and others pending).

Tightening up on SYFO case preparatory to lowering into hole.

Photograph below shows sample record made by the H-K. Photographs at right show SURWEL and SYFO Clinographs.

SPERRY-SUN WELL SURVEYING COMPANY

1608 Walnut Street, TULSA, OKLAHOMA, 425 Petroleum Building

HOUSTON, TEXAS, 3118 Blodgett Avenue

Philadelphia, Pa., LONG BEACH, CALIF., 549 East Bixby Road (3800 Block, Atlantic Ave.)

because the seamen's strike forced operators to curtail drilling and production activities, as the field is dependent upon tankers for the transportation of crude to refining centers. In the meantime, however, General Petroleum has been plugging right along with No. 13 Notten, a projected deep test now down 9,221 feet in a rather hard oil sand. This well is scheduled for completion in the deep 57 zone. The last deep well of the General Petroleum in this field was somewhat of a disappointment because of water trouble following an excellent production test. The output showed a water cut of 25 per cent. It was later plugged back and finished in the upper zone.

The Union Oil Co. does not seem to have found anything of interest in its No. 1 Dryden in the Bardsdale district of Ventura County and it is likely drilling operations will be resumed in the near future at 3,336 feet. The failure of this well to show commercial production at its present depth was disappointing but there is still an excellent chance ahead, probably within the next 1,500 to 2,000 feet. Continental Oil Co. has recovered from the mechanical trouble in its San Miguelito No. 4 and is again drilling, approaching the 5,000-foot level. The Texas Co., having acquired several thousand acres adjacent to Fillmore in Ventura County, has staked location for a first test in Section 29-4-19 and spud should be made within 15 days.

Inglewood

Two new wells were finished in the Inglewood Field of Los Angeles Basin and both registered rather large production. The Shell started off the week by completing No. 18 Rindge flowing 1,489 bbls. of clean 34.2 gravity oil and 1,335,000 feet of gas per day, and the Standard finished the week by completing No. 74 L. A. I. doing 1,014 bbls. per day on a compressor following its failure to result in a natural flow. The Shell's new well was bottomed at 3,885 feet and finished with a 5¾-inch liner including 575 feet of perforated, while the Standard's new producer was bottomed at 4,030 feet. Standard has several additional locations staked for immediate work in this field and the Shell is starting to rig up No. 19 Rindge for an early spud.

In the Dominguez Field of Los Angeles Basin, Union Oil Co. completed No. 38 Hellman several days ago, brought in flowing 790 bbls. of clean 30.6 gravity oil per day from the second Callender zone at 4,405 feet after the hole had been finished with a 6⅝-inch liner carrying 174 feet of perforated. Both the Shell and Union have mapped out an active development program for this field within the next several months. The Shell has mapped 11 new locations and the Union has listed six additional wells on the Callender and Hellman leases. Standard Oil Co. listed another new producer in the West Coyote Field by completing No. 59 Emery flowing 645 bbls. of fairly clean 30.9 gravity oil per day from 5,804 feet. The Seal Beach Field of Los Angeles Basin seems to have taken a new lease on life due to drilling activities of the Associated, Continental and Standard Oil companies.

Midway-Sunset

Hallmark Oil Co. completed its No. 2 Midway in the Midway-Sunset Field of Kern County, brought in pumping 232 bbls. of 23.1 gravity oil per day from 2,567 feet. The output is still showing a rather high water cut but may clean up within the next few days.

In the Round Mountain Field of Kern County, the Honolulu finished No. 16 in Section 18-28-29, which proved good for 458 bbls. of 18.3 gravity oil per day from 1,935 feet. This well was given a production test but took more than the usual time to get cleaned out. The Honolulu has also completed No. 23 in the same section, but this producer, bottomed at 1,990 feet and finished with a 6⅝-inch liner carrying 61 feet of perforated, has not got under way. It will be placed on the beam within the next 48 hours. In the McVan area, Ohio Oil Co. completed No. 5 Premier, good for 177 bbls. per day from 2,775 feet after the hole had been finished with an 8⅝-inch liner with perforations at 2,520-60 feet and at 2,685-2,722 feet.

Several potential producers are nearing completion out in the west section of the Kern River Field and it appears likely this drilling program

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	June 23		June 16			
Intercoastal-domestic:	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Fuel oil	.....	.....	.....	.....	.....	7,644,512
Diesel and gas oil	.....	.....	.....	.....	527,098	931,159
Gasoline	.....	.....	116,484	16,641	3,547,745	3,555,528
Kerosene	.....	.....	.....	.....	669,351	568,197
Other finished oil	.....	.....	.....	.....	.....	16,171
Foreign exports:						
Crude oil	657,800	93,971	383,790	54,827	5,569,177	3,746,510
Fuel oil	148,543	21,220	446,249	63,750	6,098,714	6,200,134
Diesel and gas oil	45,987	6,570	88,996	12,714	2,126,539	2,097,697
Gasoline	168,351	24,050	174,535	24,934	2,958,847	1,986,959
Kerosene	49,652	7,093	6,768	967	771,718	1,009,514
Other finished oils	.....	.....	.....	.....	.....	3,539
Other unfinished oil	9,661	1,380	.....	.....	65,822	127,271
Coastwise-domestic:						
Crude oil	.....	.....	210,928	30,133	2,647,166	4,739,656
Fuel oil	182,937	26,134	307,037	43,863	4,720,379	4,500,822
Diesel and gas oil	25,687	3,670	42,293	6,042	497,364	385,769
Gasoline	340,639	48,663	346,602	49,515	4,711,553	5,015,013
Kerosene	7,932	1,133	7,257	1,037	73,022	81,472

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic:						
Fuel oil	.....	.....	.....	.....	.....	110,650
Diesel and gas oil	.....	.....	.....	.....	157,258	448,112
Gasoline	.....	.....	.....	.....	.....	145,806
Kerosene	.....	.....	.....	.....	149,715	276,412
Asphalt	.....	.....	71,802	10,257	280,849	.....
Lubricants	4,529	647	5,142	735	29,221	18,331
Foreign exports:						
Crude oil	.....	.....	70,520	10,074	1,426,499	853,330
Fuel oil	65,839	9,406	26,131	3,733	904,443	839,792
Diesel and gas oil	.....	.....	54,567	7,795	576,789	714,520
Gasoline	.....	.....	6,912	987	1,412,060	1,728,352
Kerosene	.....	.....	.....	.....	447,556	402,334
Lubricants	14,476	2,068	4,563	652	130,074	72,395
Other finished oil	.....	.....	.....	.....	.....	2,760
Other unfinished oil	.....	.....	.....	.....	.....	5,750
Coastwise-domestic:						
Fuel oil	589,102	84,157	376,044	53,721	2,923,857	1,842,892
Diesel and gas oil	.....	.....	.....	.....	134,687	95,371
Gasoline	209,074	29,868	140,821	20,117	2,486,656	1,784,449
Kerosene	.....	.....	14,702	2,100	53,139	48,112

involving several operators and several sections of land will continue for the next six months. This drilling is not of an intensive nature but these new wells can be drilled from spud to completion in less than three weeks. Western Gulf Oil Co. is making preparations to finish two new wells in the Fruitvale Field of Kern County and both of them, No. 1 Red Ribbon and No. 1 Scott, should be tanking oil within the next few days. Two new wells are to be started in the North Belridge Field within the next 15 days as Continental Oil Co. is grading location for No. 6 Result in Section 36-27-20, and the Standard is getting ready to spud in No. 3 McPhail in Section 36-27-20. The Union is working on two drilling projects in this field, but it will be several months before either is deep enough to pick up the anticipated pay.

Tehama County

The Northern Counties Petroleum Co., drilling a wildcat test on the Corning anticline in Tehama County, has reached 4,510 feet and is still drilling. The log of the well shows the outlook is better now than at any time since the well was spudded in. Ditch showings at 4,501 feet were the best recorded to date. The drilling mud, weighing 72 pounds and producing a bottom hole pressure of about 2,250 pounds, surged over the blowout assembly for three hours accompanied by large volumes of dark oil scum and foam on the ditch. As has been the case for the past several hundred feet, the mud at the head of the ditch liberated enough gas to be ignited, and flames rose to a height of 3 feet above the flow line.

In the lower part of the hole, the log shows a number of fossils and plant remains, some in good shape and others mere fragments. These include filar pyritic, arenaceous forms and well-preserved Nodesaria, as well as taxedent pelecypod and possibly two specimens of Textularia. The lithology shows an indistinct lamination with good fossility. The formation is greenish gray, firm but flaky, micromicaceous, well sorted, clayey, finely sandy siltstone containing about 1 per cent tan concretionary limestone in nodules and nodular layers up to 3 inches thick. Cores show an apparent dip in the structure at the present depth of about 3 degrees.

Canadian Fields

Crude Production in Alberta in May Increases Over April

By VICTOR LAURISTON

CHATHAM, Ontario, July 6.—Crude production from Alberta Fields in May totaled 105,488 bbls. compared with 99,850 bbls. in April. Turner Valley naphtha was up from 94,670 to 100,579 bbls.; Turner Valley light crude from 1,861 to 1,882 bbls. and Wainwright heavy crude from 803 to 1,068 bbls. Red Coulee light crude dropped from 2,046 to 1,901 bbls. and Skiff heavy crude from 470 to 58 bbls.

Of Turner Valley production, Royalite Oil Co. contributed 40,499 bbls., a considerable increase over previous months. The Mercury Mill City and Miracle group produced 16,853 bbls. Highwood-Sarcee Oils' No. 1 ranked third with 5,607 bbls. Model Oils, Ltd. delivered 5,062 bbls. from two wells and Century Royalties' No. 1 produced 4,591 bbls.

Federal Oil and Gas Survey

Work is being commenced this month and will continue till October on the widespread petroleum and natural gas survey launched by the federal mines department at Ottawa as part of a $1,000,000 program of geological work in connection with mineral resources.

One of the most important areas to be examined is in Central Alberta and Western Saskatchewan, east of Edmonton. This portion of the survey will be in charge of Dr. G. S. Hume, with individual parties in charge of Prof. R. L. Rutherford and P. S. Warren of the University of Alberta, Dr. C. H. Crickmay of Vancouver, and C. O. Hage of the University of Saskatchewan.

New Valley Test

Shareholders of McLeod Oil Co. ratified a proposal under which the company will complete the unfinished New Valley Oil Co.'s No. 1, LSD 4, Section 6-21-2w5. Work will resume from 2,200 feet and continue to at least 4,200 feet unless commercial production is found. Shareholders of the McLeod Oil Co. elected the following officers: president, H. P. McLeod; vice president, P. J. Timms; secretary, J. J. Jesse; directors, H. A. Horstman, R. J. Burns.

Turner Valley Field

In Section 28-18-2w5, South Turner Valley, Model Oils' No. 3, LSD 1, Section 22-20-3w5 is below 525 feet, after changing to rotary outfit.

In the far south, Union-Freehold Oil Corp.'s No. 1, LSD 8, Section 21-18-2w5, is fishing at 5,610 feet.

Drilling In Ontario

In the Dover Field, Kent County, Ontario, Prairie Oil & Gas Co.'s No. 3, Stephens farm, Lot 2, Front Concession, was treated with acid in the Trenton limestone. It developed an initial flow after treatment of 400 bbls. in 20 hours with a considerable increase in gas, and has been shut in. Prairie's No. 4, same lot, is below 1,600 feet. Central Pipe Line Co.'s No. 2, Joseph Sterling farm, Lot 1, Front Concession, has spudded.

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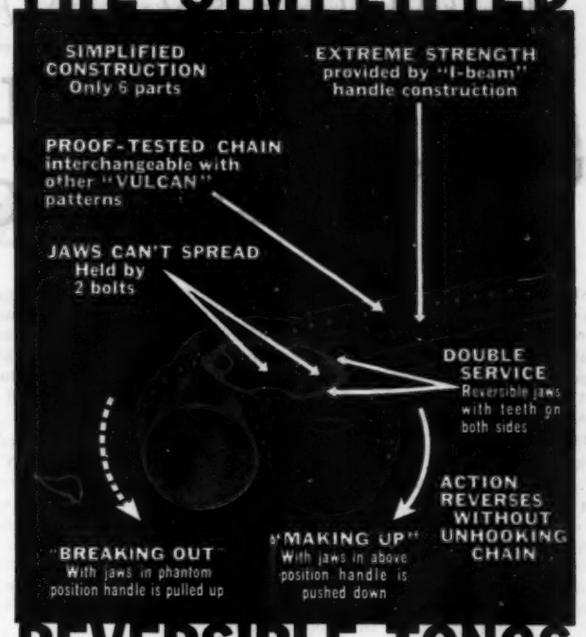
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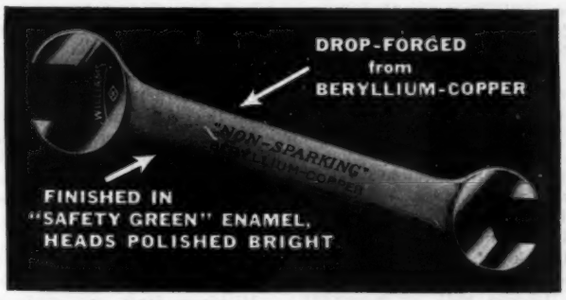

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Michigan Field Report

CRYSTAL FIELD COMPLETION REVIVING INTEREST IN AREA

By PAUL A. ELLIOTT

MUSKEGON, Mich., July 8.—Completion of one of the largest wells encountered in the Crystal Township, Montcalm County, oil field of central Michigan since its discovery March 28, last week revived interest which had been waning because of several "dusters."

It was T. F. Caldwell, Inc.'s No. 1 W. W. Robbins test, NE NE NE Section 3-10n-5w, Crystal Township, which came in with an initial flow of about 300 bbls. a day in two-hour heads early last week but jumped to between 125 and 150 bbls. an hour, that provided the latest sensation in Crystal. It flowed 270 bbls. in two hours during a late test.

The Dundee was topped at 3,181 feet after a mistake in measurements had the operators worried. First pay was encountered at 3,191 feet and at 3,196 feet it struck the big pay on a location more than a mile northwest of the discovery and several nearby producers. It also is located about a quarter of a mile west and one location south of Burnstein Oil & Gas Co.'s No. 1 Joseph Keel, SW SE SE Section 35-11n-5w, Ferris Township, the first test indicating a major extension of the new central Michigan Field in this direction. Operators plan to deepen the Keel well slightly below its present depth of 3,194 feet in search of the same heavy pay. It made about 250 bbls. at this depth.

W. J. Bernier's No. 1 William E. Strait, SW NW SW Section 35, Ferris Township, also struck a show of gas and oil in the Dundee at 3,211 feet and was shut down over the holiday and week-end. It is located a half mile west and a quarter mile north of the Robbins well, or somewhat farther along the northwest trend first indicated by the Daily Crude Oil Co.'s No. 1 John Tow in Section 2, Crystal Township, and confirmed at a greater distance from the discovery when the Burnstein-Keel well came in about two weeks ago.

That the new trend would develop a well as large as the Caldwell-Robbins, however, exceeded the operators' hopes and put new life in the field this week resulting in several new locations and a number of new drilling starts on sites previously placed under permit in the rush of the past three months.

Gordon Oil Co.'s No. 1 Frost heirs, SE SE SW Section 1, Crystal, was not as encouraging, however, on a site about a mile or so due west of the Durbin, J. W. Leonard, Jr., and others' discovery, when it ran into bottom water at 3,219 feet without developing commercial production on the way down. It struck several shows of oil and gas, however, so was plugged back to 3,211 and then redrilled to 3,214 feet after which it had about 100 feet of oil in the hole with no water. It was to be treated with acid in an attempt to make it at least a small commercial producer. It is believed to indicate a narrowing of the field on an east and west line with the Durbin to not more than 1½ miles of good production.

J. W. Leonard, Jr., and others' No. 2 C. R. West estate, SE SE SW Section 2, Crystal, west offset to the Eastern Gulf Oil Co.'s No. 1 George W. Barger, smallest producer in the field to date, had been drilled to 3,202 feet and was to be tubed and pumped. Oil, gas and water were struck at 3,192 feet. The Barger was to be treated.

Another discouraging development was the drowning out of Snowden & McSweeney's No. 1 Wight estate, west offset to the McClanahan Oil Co.'s No. 1 Flint, now the largest producer on "Wal Street." The Wight came in two weeks ago with a comparatively small initial of slightly less than 1,000 bbls. a day as the farthest west well on the south side of the Crystal Field road. It is only half a mile from the Durbin and serves to strengthen the growing belief all "Wall Street" tests are edge wells and their flow driven by water pressure.

Operators planned swabbing and pumping to determine other possibilities the well might have become salted or paraffined over the pay sands. Developments in this section also indicate the pay sands are shallow compared with the Dundee horizon in Porter and other central Michigan fields.

Two Crystal Gassers

Michigan Stray gas sands proved productive in two Crystal area tests, one near the east edge of the oil field in Section 1, Crystal Township, and the other a 2,000,000-foot well in Section 26, Ferris Township, more than a mile northwest of the St. Louis Pipe & Supply Co.'s No. 1 Osterhaut, a Section 36 gasser in the same township.

The new Crystal Township gasser was Wing Brothers' on the Crystal Township School District lease, SW SW SW Section 1, which made 700,000 feet a day at 977 feet and was shut down over the holiday week-end. It probably will be deepened seeking an increase as Taggart Brothers' No. 1 Fred Smith, directly west, plugged and abandoned as a dry hole in the Dundee, had an estimated flow of 3,000,000 feet a day when it passed through the Michigan Stray some weeks ago.

United Producers & Royalty Co.'s No. 1 Ernest and Martha Conner, SE SW NW Section 26-11n-5w, Ferris Township, made 2,000,000 feet a day at 1,054 feet, about 1 foot in the Michigan Stray. It may be carried on to the Dundee in search of oil, however, because of the recent successes of the Burnstein-Keel and Caldwell-Robbins. The St. Louis-Osterhaut, first completed as a gasser, also may be drilled to the Dundee for oil.

Nearing Completion

About half a dozen other tests in Crystal Township were nearing the Dundee as the week closed with several virtually certain to be completed this week.

They include the Pure Oil Co.'s A-1 Claude Mangus, NW SW SW Section 2; Stork Oil Co.'s No. 1 George Dickenson, SE SW SE Section 3; Michigan Producers & Refiners and A. H. Weber, trustee, on the No. 1 William Strait, SE NE SW Section 3; Daily Crude Oil Co.'s No. 1-A John Tow, SE SE SE Section 3; the Rowmor Corp.'s No. 1 James Barger, NW NW NE Section 10; J. E. Evans, trustee's No. 1 Smith, NE NE NW Section 10 and Snowden & McSweeney's No. 2 Wight heirs, NE NW NE Section 10.

Gratiot County

Four Newark and New Haven Townships tests in Gratiot County near Crystal Township also were attracting considerable interest this week, as all were drilling in or near the Dundee.

The Newark Gas & Oil Syndicate's No. 1 George Beck, NE SE NE Section 29-10n-3w, Newark Township, was rerunning casing after failing to get a water shutoff and striking a show of oil at 3,187 feet, 2 feet after it was believed to have encountered water at 3,185 feet.

Strange & Fortney's No. 1 Bovee, NW NE SW Section 7-10n-4w, New Haven Township, had a hole full of water at 3,220 feet and will be plugged and abandoned. Dundee was topped at 3,204 feet. Rex Oil & Gas Co.'s No. 1 Morse & Biddle, NW SW SW Section 20, same township, was still shut down at 3,226 feet after striking a 57-foot show of oil in the Dundee at 3,182 feet. The Rex test will be treated.

Crystal Oil Co.'s No. 1 Shaver, NW NW NE Section 4, New Haven, was drilling at about 3,100 feet and about ready to test the Dundee.

New Crystal Locations

Recent successes both for gas and oil in the Ferris Township, Montcalm County, extension of the Crystal Field already have resulted in the issuance of seven new state permits in the township as follows: McClanahan Oil Co.'s Ina J. McConkie, SW NE SE Section 33-11n-5w; Daily Crude Oil Co.'s No. 1 John Flint, SE SW SE Section 35; Burnstein Oil & Gas Corp.'s No. 2 J. J. Keel, NW SE SE Section 35, and four on the Jesse Flint lease taken out by T. F. Caldwell, Inc., as follows: No. 1, SE SE SW Section 35; No. 2, SW SE SW Section 35; No. 3, NW SW SW same section, and No. 4, SW SW SW same section. The Daily Crude Oil Co. also took out a permit and started work on the No. 2-A John Tow, SW SE SE Section 3-10n-5w, Crystal Township. A rig also is being built one location south of the Pure-Mangus test with a direct east offset also moving in materials. Another rig has been erected on the R. Lott farm, S SE Section 11, Crystal, on a lease said to be owned by H. L. McEvoy and one is up on the Young farm, NE NE NW Section 15, Crystal Township, for an unidentified operator. McClanahan Oil Co. also is setting up for its No. 2 Harry Flint. Joseph Victor and associates, of Holland, also have moved in a rig for a new test within the village limits of Crystal about 2 miles west of production, but have been delaying operations pending the completion of several in-between tests, it is believed.

Gratiot Locations

Several new wildcat and semiwildcat tests also are being planned in several Gratiot County townships, it was revealed. They include the Jackson-Meyer-Schmidt, trustee's No. 1 Newton Garner, NE NE SE Section 1-9n-4w, North Shade Township, for which a rig already has been erected.

St. Louis Pipe & Supply Co. has taken out a state permit for another isolated test on the John Longanbach lease, SW SE SE Section 10-12n-2w, Bethany Township, Gratiot County, while the Michigan Gas & Oil Corp. is building a rig southwest of Alma in Arcadia Township, where two tests already have been started. James Monroe and associates also are reported planning a wildcat in Seville Township of Gratiot.

A spudding machine also has been moved on location for the No. 2 R. B. Shaver in Section 4, New Haven Township, where the Crystal Oil & Gas Co., Inc., is completing the No. 1 Shaver. The Lupher Drilling Co. also moved in materials for a gas test on the Gould farm northeast of the Shaver lease.

Midland County

Two new producers added 230 bbls. initial in Midland County where a dry hole also was completed.

Roosevelt Oil Co. and Goll, Graves & Mechling completed a 200-bbl. Dundee well, the No. 8 J. W. Campbell, in Section 17-13n-1w, Porter Township, at a total depth of 3,401 feet. Limestone was topped at 3,381 feet and the well put on the pump although it was flowing by heads.

Pure Oil Co.'s No. 14 Mina Narmore, NW NW SE Section 16, same township, also was drilled in for an initial of 30 bbls. daily, topping the Dundee at 3,425 feet and drilling to

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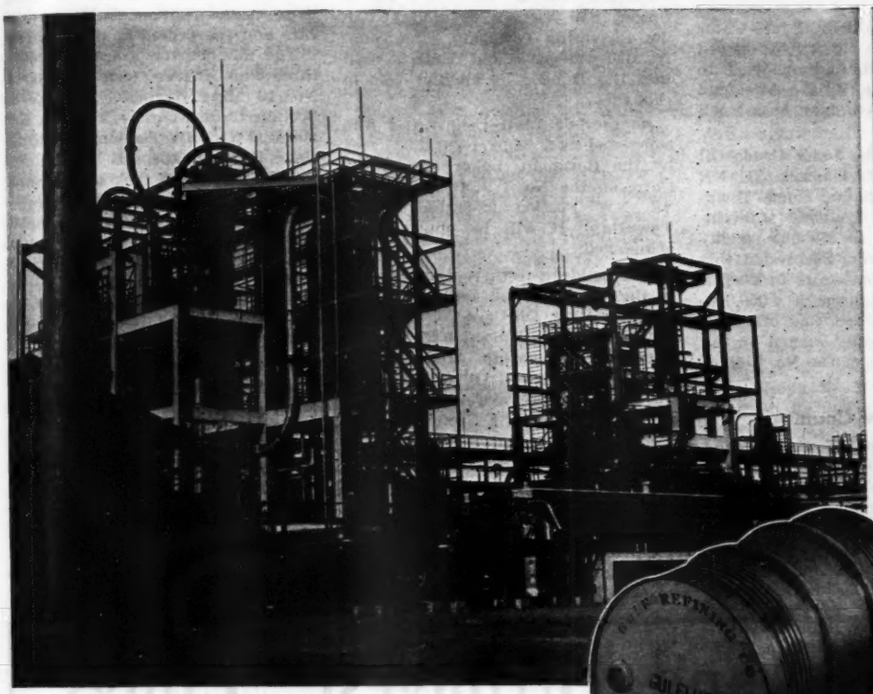

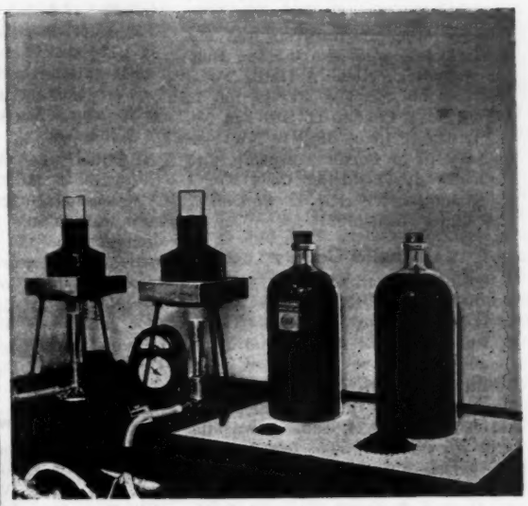

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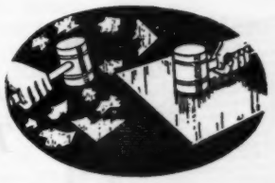

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3,471 total. It probably will be treated with acid as the No. 15 Narmore on the same lease, drilled in the previous week, was considerably strengthened by treatment.

W. Hunter Atha's No. 2 Thomas Moran, south offset to a small producer completed several months ago, was dry at 3,490 feet after topping the Dundee at 3,447 feet.

Pure's No. 1 Cora A. Fenby and others, C S SE SW Section 34-14n-2w, a Greendale Township, Midland County extension test, was reported a failure in the Dundee after drilling a considerable depth into the limestone but definite figures were unavailable.

Three other Porter tests and one in Greendale were nearing the Dundee including: Richard Hall's No. 4 Harris-Bond, NE NW SE Section 7; Pure's No. 7 Charles C. Hill and No. 5-C Laura E. Root, SE NW NW Section 20, all in Porter Township, and Hubbell Oil Producing Co.'s No. 1 Mary Jacobs, NW NE SE Section 7, Greendale Township.

Isabella County

McClanahan Oil Co.'s No. 1 A. D. McRae, NE NE NE Section 13-15n-3w, Denver Township, Isabella County, was dry in the Dundee and being abandoned.

United Drillers, Inc., shut down the No. 1 John D. Vandercook, SE NE SE Section 24, same township, ready for casing at 3,606 feet. Gordon Oil Co. has abandoned its No. 1 Edgar O. Graham, SW NE SW Section 28, Denver Township, dry at 3,645 feet after topping the Dundee at 3,607 feet.

W. Hunter Atha cased his No. 1 Horace Fordyce, C NW NE Section 34-16n-5w, Gilmore Township, preparing to go on to the Dundee in a test which failed to strike gas in the Michigan Stray.

W. J. Bernier is still undecided whether to plug or deepen the No. 1 William Robinson, C NW NW Section 1-14n-6w, Broomfield Township, Isabella County, which made about 500,000 feet of gas daily when drilled into the Michigan Stray sands.

Mecosta-Montcalm

The Jasmid Oil Corp. has decided to abandon the No. 1 Coopersville State Bank, C S half Section 22-13n-10w, Aetna Township, Mecosta County, after it failed to develop commercial gas production drilling into water at 1,175 feet. The rig will be moved one location south and one east to try for gas again in the Michigan Stray sands. A good show was struck at 1,167 feet.

Production of the Daily Crude Oil Co.'s No. 2 H. J. Hansen, SE NE NW Section 10-12n-6w, Home Township, Montcalm County, was increased from 130 to 470 bbls. a day with acid treatment. Success in this test has led the operators to deepen the No. 5 Christiansen, a 4,000,000-foot gasser and direct east offset. A new test also is being started on the Jensen farm south of the No. 2 Hansen well.

Ogemaw County

Daily production of the Melling Oil & Gas Co.'s No. 3 State of Michigan, NE NE NW Section 6-21n-3e, Mills Township, Ogemaw County, was boosted from 35 bbls. natural to about 300 bbls. daily by acid treatment. It flowed 16 bbls. in 15 minutes and made 110 bbls. in nine hours. Dundee was topped at 2,446 feet and drilling suspended at a total depth of 2,608 feet.

Section 28 and 29 of West Branch Township just now are getting the heaviest play of any part of the Ogemaw fields with four tests drilling at the corner.

Other Tests

A new disappointment resulted when the Beaverton Oil & Gas Co., Inc.'s No. 1 Mrs. Ross, SE SW NE Section 7-17n-1w, Tobacco Township, Gladwin County, drilled into bottom water about 80 feet in the Dundee.

Strange Oil & Gas Co.'s No. 1 Spicer, SW NE NW Section 11-17n-2w, Beaverton Township, same county, also was cased and ready to drill into the Dundee as another test in this area.

Another St. Clair County test was completed as a "duster" at 1,333 feet by the Bornman, Laker Gas & Oil Corp. on the No. 1 J. C. Boldt, SW SE NW Section 28-8n-16e, Grant Township. It will be plugged and abandoned.

Two wildcat tests reported shows in the Traverse and Berea, namely, the Deep River Oil Co.'s No. 1 Stokaszynski, NE SE SW Section 27-19n-4w, Deep River Township, Arenac County, and the Farwell Oil & Gas Co.'s No. 1 Fred Siegle-Farwell Mills & Elevator Co., NW SE SE Section 26-17n-5w, Surrey Township, Clare County. Formations have been running high in the latter test.

State Permits

Eighteen locations in addition to the 10 already mentioned in the Crystal area have been placed under permit by the state conservation department during the past two weeks.

They include the Mecosta Development Co.'s No. 1 George G. and Mabel Totten, C NW NW Section 11-14n-9w, Austin Township, Mecosta County, already completed as a 1,100,000-foot gasser in the Michigan Stray sands.

The other 17 include three each for Porter Township, Midland County, and West Branch Township, Ogemaw County, and one each in Greendale, Midland; Jasper, Midland; Mills, Ogemaw; Sherman, Isabella; Cato and Belvidere, Montcalm; Sheridan; Millbrook and Colfax, Mecosta; Grout, Gladwin; and Lincoln Township, Osceola. About half are wildcats and the others in proved areas.

The new Porter locations are for three Pure Oil Co. tests as follows: No. 16 Mina Narmore, C N N SE Section 13-13n-1w; No. 17 Mina Narmore, C N S SW Section 15, and the No. 8 E. Kleinhans, NE NW NE Section 20. Pure also took out a permit for the 5-B Mattie Yost, C N NW SE Section 34-14n-2w, Greendale Township. The new Jasper location also was for Pure's No. 1-D J. B. Rayner, C N NE NE Section 11-13n-2w.

The Weber Oil Co. took out the three permits for new locations in West Branch Township, Ogemaw County, as follows: No. 1 H. W. Schulty, NE NW NE Section 29-22n-2e; No. 1 Walter Wilcox, NW NE NW Section 34, and the No. 1 W. S. and E. H. Crawford, NW SE SE Section 28. The other Ogemaw County location was taken out by Fred D. Clark and Cleston C. Johnson for No. 1 State of Michigan, NW NE SE Section 6-21n-3e, Mills Township.

Two Montcalm County locations were placed under permit as follows:

World's Largest and Strongest Tongs

PETOL NO. 20 BULL TONGS

Another addition to the line of PETOL Tongs, the STANDARD of the Oil Industry throughout the World.

DEMAND IN THE FIELD HAS MADE IT STANDARD PETOL EQUIPMENT

ABOVE: Showing No. 20 PETOL BULL TONG in open position.

RIGHT: Showing No. 20 PETOL BULL TONG closed around 13" O.D. Pipe.

The PETOL BULL TONG, shown here in both opened and closed position, has become standard PETOL equipment by popular demand created by the efficient performance on *TOUGH JOBS* in the Texas Gulf Coast and California.

This tong, capable of producing 4,000,000 INCH-POUNDS TURNING TORQUE, is used for general break-out work on deep jobs. It is built of the highest quality Chrome Nickel and Chrome Vanadium steels and is equipped with multiple high speed steel tooth inserts.

It conveniently handles any O. D. from 6" to 22", thereby ELIMINATING COSTLY ALTERATIONS to meet various size requirements. Adjusting tongs to fit various sizes involves a cost of only a few dollars, as compared with expensive heads required for other makes.

There's a PETOL Tong for any job you may encounter.

WE SOLICIT THE OPPORTUNITY OF DISCUSSING YOUR TONG PROBLEMS.

GEARENCH MFG. COMPANY

HOUSTON, TEXAS, U.S.A.

"Most Complete Line of Tongs in the World"

Michigan Exploration Co., Inc.'s No. 1 William J. Richardson, SW SW NE Section 3-12n-7w, Belvidere Township, and Gordon Oil Co.'s No. 1 E. E. Kayt, NW NW NW Section 21-12n-8w, Cato Township.

Three Mecosta County permits included Taggart Brothers, Inc.'s No. 12 on a State of Michigan lease, C SW NE Section 32-15n-9w, Colfax Township, for a wildcat gas test; W. J. Bernier's No. 1 E. Tiffany, C NW SE Section 32-13n-7w, for a Millbrook Township gas test and H. O. Andrew and others' No. 1 Jesse Moore, C NE SW Section 14-15n-7w, for a new Sheridan Township gas test.

A Sheridan Township, Isabella County, gas test was placed under permit by Karl K. Liebrand, trustee, for the No. 1 State of Michigan, C SW SW Section 35-15n-6w.

Permits for two wildcat tests were as follows: Sun Oil Co.'s No. 1 Karl Fanslau, C NE NW Section Section 6-18n-2w, Grout Township, Gladwin County, and Gordon Oil Co.'s No. 1 W. Giese, SW SE NW Section 34-18n-10w, Lincoln Township, Osceola County.

It also was reported in the village of Morley a rig was being moved in for a new wildcat test about 2 miles east in Section 20-13n-9w, Deerfield Township, Mecosta County.

New wildcat activity also is foreseen in Ionia County where two oil companies are planning tests. The Benedum-Trees Oil Co., of Pittsburgh, Pa., recently has filed 55 leases covering several thousand acres, principally in Orleans Township. It also was announced by J. W. Wyckoff, geologist, a new test will be drilled in North Plains Township, where it is believed a structure exists although previously drilled tests have struck only water.

Domestic Natural Gas Sales Unchanged

NEW YORK, July 8.—Manufactured and natural gas utilities reported revenues of $62,357,100 for April, 1935, representing an increase of about 1 per cent from the figure of $61,724,600 for April, 1934, it was announced today by Paul Ryan, of the American Gas Association.

Revenues of the manufactured gas industry aggregated $31,957,200 for the month, a decrease of 2.1 per cent from the corresponding month a year ago. Revenues of the natural gas industry, however, totaled $30,399,900 for April, or 4.5 per cent more than for April, 1934.

Domestic uses of manufactured gas continued to decline in April, dropping from 20,066,800,000 feet in 1934 to 19,180,400,000 feet during the current year, a loss of 4.4 per cent. Domestic sales of natural gas were practically unchanged at 29,132,100,000 feet for the month.

Sales of both manufactured and natural gas for industrial-commercial uses, however, averaged about 9 per cent above the figures reported for April, 1934.

For the four months ending April 30, manufactured and natural gas revenues aggregated $271,073,400, an increase of 1.4 per cent over the first four months of 1934. Revenues from domestic customers declined slightly for the period. Revenues from industrial and commercial users, however, increased 7.1 per cent over the four months interval of 1934.

Central West

Operations in Central Ohio, Indiana and Kentucky Area

By GEORGE A. WHITNEY

FINDLAY, Ohio, July 8.—In Freedom Township, Wood County, Fuhr & Villwock abandoned No. 1, in Section 34. In Liberty Township, Mary V. Concen is drilling on the C. E. Mercer farm, Section 14. Wilber P. Hoople is drilling No. 6 on the Mary Reitze farm, Section 23, Perrysburg Township. Pember and Raydure are drilling No. 1 on the R. E. Wagner farm, Section 27, Jackson Township.

In Henry County, in the vicinity of McClure, Stoddard & Darke are drilling on the C. S. Shelly farm, Section 7, Marion Township, and P. D. Snonby is drilling No. 1 on the Curry heirs farm, Section 6, also in Marion Township.

In Allen County, Ohio Oil Co. is drilling No. 8 on the George farm, Section 9, Perry Township. H. C. Millee and others are drilling No. 1 on the Arthur B. Moorman farm, Section 35, Spencer Township. In Bath Township, Carman Oil Co. is drilling No. 3 on the T. J. Hadsell farm, Section 13.

In Auglaize County, William C. Sowell is drilling No. 2 on the John F. Miller farm, Section 15, and has a rig for No. 1 on the Simon O. Cook, Section 11, same township. In Noble Township, N. E. Masters & Co. is drilling No. 1 George Ruble farm, Section 11. In Douchoquet Township, C. Wentzer is drilling on his own farm, Section 28. N. E. Masters is drilling on the J. W. Wisner farm, Section 35, Hoagland Township.

In Ottawa County, Peninsular Oil Co. is drilling No. 1 on the J. P. Caugney farm, Section 8, Catawba Township.

In Hardin County, Waltermier & Co.'s No. 2 on the Anna Sharf farm, Section 18, Pleasants Township, is a gas well at a depth of 1,342 feet.

In Hancock County, Brown and others are drilling on the J. E. Shoop farm, Section 26, Pleasants Township.

In Van Wert County, H. C. Miller is drilling on the James P. Davis farm, Section 5, Jennings Township. In Liberty Township, J. O. Yahn farm, Section 27, hopes to bring in a commercial producer. In Sugar Creek Township, Mid-Continent Oil & Gas Co. is drilling No. 2 on the Frank Brenneman farm, Section 1. Duncan & Smith are drilling No. 1 on the C. E. Bowersox farm, Section 17, Jackson Township. Hystanton Oil & Gas Co. is drilling No. 3 on the J. A. Reed farm, Section 30, same township. Elmer Caudill & Co. is drilling No. 4 on the Mary B. Sheetz farm, Section 30, same township.

In Seneca County, Phillips & Co. are drilling No. 2 James D. Watson farm, Section 1, Hopewell Township. J. L. Barrett is drilling No. 1 on the T. N. Einsel farm, same section. In Liberty Township, McKinney & Sons are drilling No. 2 on the Curtis Edwards farm, Section 24. R. E. Greene is drilling No. 3 on the T. C. and B. G. Schaull farm, Section 30, Liberty Township.

In Wyandot County, Dempsey and others are drilling No. 1 on the S. P. Hooper farm, Section 7, Crane Township. Strouse & Co. has a rig for No. 1 on the Fred Mozier farm, Section 7, same township. In Tymochtee Township, Perkins and others are drilling No. 1 on the Ephram Hare farm, Section 21. R. C. Jones is reported drilling below 1,800 feet in Section 36, Ridge Township.

CENTRAL OHIO

In the Cleveland area, Ohio Fuel Gas Co. has a location for No. 1 on the Ralph W. Frank farm, Lot 37, Strongville Township, Cuyahoga County.

In Richland County, Spohn & Nachman are drilling No. 1 on the Uranna Freer farm, in Weller Township. Ohio Fuel Gas Co. is drilling L. C. Benedict farm, in Worthington Township.

In Holmes County, Ohio Fuel Gas Co. has a location for No. 2 on the Charles McFarland farm, Lot 11, and Hulse and Tedlow have a rig on the Paul J. Blanchet farm, Lot 12. Lydic Oil & Gas Co. has a rig for No. 2 on the Gladys McDowell farm, Section 26, Monroe Township, and Ohio Oil Co. is drilling No. 1 on the Maggie Allison farm, Section 21, same township.

In Summitt County, East Ohio Gas Co. is drilling No. 3 on the William Ritter farm, Section 18, and Robinson & Co. has a rig for No. 1 on the Phillip Doerr farm, Section 16, Lake Township. City Natural Gas Works is drilling No. 1 on the Mertz & Moyer farm, Section 14, Pleasants Township, and has a rig for No. 3 on the F. A. Ruff farm, Section 31, Rush Creek Township.

In Stark County, East Ohio Gas Co.'s No. 1 on the John C. Mayer farm, Section 16, Plain Township, is a gas well at 4,533 feet. East Ohio Gas Co. is drilling below 3,600 feet on the Enos R. Mathie farm, Section 8, same township. Same company's No. 1 on the Angeline Halter farm, Section 17, same township, is below 4,175 feet. In Perry Township, Lyons and others are drilling below 3,000 feet on the Jacob F. Hess farm, Section 2, and White and others are drilling below 1,700 feet in No. 2 on the Jacon Isler farm, Section 25, same township. Dewalt & London has a fishing job around 400 feet in No. 1 on the Charles C. Weirough farm, Section 7, Osnaburg Township. East Ohio Gas Co. is drilling below 4,050 feet in No. 1 on the J. and L. Deetz farm, Section 21, Jackson Township.

KENTUCKY

The Kentucky Field shows some nice producers. In Hancock County, Joseph B. Mayer's No. 19 on the J. W. Matthews farm, had an initial of 150 bbls., and No. 20, same farm, produced 100 bbls.

In Ohio County, Snowden-McSweeney Co.'s No. 19 on the J. W. Peckenpaugh farm, produced 75 bbls., and No. 1 of the same company on the F. E. Midkiff farm produced 5 bbls. Same company's No. 8 on the Kate Roberts farm, same county, was a gas well. Cumberland Petroleum Co.'s No. 25 on the Rolly Richards farm had 50 bbls. initial. Same company's No. 9 on the Guy Richards farm, in the Oak Pool, same county, produced 15 bbls. initial. C. C. Brener's No. 5 on the Coppage farm, produced 20 bbls. initial.

INDIANA

Only one completion were reported in the Indiana Field, Charles E. Wyman's No. 1 on the Offa Chastin farm, Section 12, Vernon Township, Washington County, a gas well. In Lawrence County, A. Law's No. 1 on the Law farm, Green Township, is drilling, and J. T. Imler's No. 1 on the Imler farm, in Pleasant Ridge Township, is drilling.

In Jay County, Hunt & Franks are drilling on the Bone farm, Section 13, Bear Creek Township. In Pike County, Claud Noble is drilling No. 1 on the William S. Sibleys farm, Section 6, Washington Township. In Martin County, George E. Nelson & Co. is drilling No. 2 on the Ethel V. Burriss farm, Section 25, Perry Township. Spaulding & Fisher are drilling No. 3 on the E. D. and E. S. Yarnell farm, Section 25, same township.

In Perry County, Rome Oil Co. is drilling No. 1 on the Sarah M. Sampley farm, Section 28, Tobin Township.

Davies Succeeds Sutro

R. K. Davies, director of the Standard Oil Co. of California, was recently elected a vice president of the company, to fill the vacancy caused by the recent death of Oscar Sutro, counsel.

Mr. Davies joined the sales department in 1912 as a clerk, at Fresno. In 1917 he was transferred to the sales management in the home office, as a special assistant. He became secretary of the sales committee in 1928. In December, 1930, Mr. Davies was elected a director. He is also executive vice president of the International Bitumen Emulsions Corp. and of Standard Stations, Inc.

Oklahoma Operations

By JAMES McINTYRE

BIG PRODUCERS IN EDMOND AND OKLAHOMA CITY FIELDS

Oklahoma County was the bright spot in the Oklahoma fields in the past week in review with a 20,000-bbl. well extending the Edmond Pool three locations north; a 3,753-bbl. well in the newly extended drilling zone within the Capitol City, and a 1,200-bbl. well in the north end of the Oklahoma City Field but outside the new zone. To add to all this the Sinclair Prairie Oil Co.'s No. 1 Corbett in the Britton area, lying between the Oklahoma City and Edmond Pools, showed unmistakable signs of being a good well with a flow of over 1,000 bbls. in 24 hours from Wilcox sand, but not yet in the completion stage.

In Noble County the Midco Petroleum Corp.'s No. 1 Yost, in NE NW NE Section 22-23-2w, Billings Pool, was cleaned out to the bottom and produced 300 bbls. of oil and 300 bbls. of water from Siliceous lime at 4,240-57 feet. This is the first free flow the well had had.

Five large producers were completed in the Fitts Pool, all of the oil coming from the Bromide sands.

Oklahoma County

The Pure Oil Co. celebrated the Fourth of July with its No. 1 Malm, SE SE SW Section 30-14-3w, to the tune of 958 bbls. of oil in the first hour, 944 bbls. the second hour and 897 bbls. the third and then shut it in, having definitely proven that production in the Edmond Pool of Oklahoma County extends at least three 660-foot locations north of the former producing limit, and probably farther. Gauge of the gas was taken each hour of the three-hour test and the first hour it made gas at the rate of 28,000,000 feet per day; the second hour, 28,700,000 feet and the third hour 26,700,000 feet. The oil tested approximately 38.5 degrees corrected and the shut-in pressure was 995 pounds one and one-half hours after the well was shut in. Operators started bailing the fluid out of the hole about 6:15 a.m., and when bailed down to about 1,200 feet the fluid started rising. Bailing was discontinued at 9:30 a.m. and the well was turned into the pits and after 10 minutes fluid began slowly to show up. Sufficient pressure soon built up to clean the hole and it was then the flow was directed to the separator. It was hailed as one of the most perfectly completed wells seen for some time. Production was coming from the second Wilcox sand logged from 6,610-6,700 feet, total depth.

Attention in this pool will undoubtedly be directed now to the Johnson & Kemnitz' No. 1 Price, in the SW SE NW Section 30-14-3w, one-half mile north of the Pure's No. 1 Malm, to further prove the extent of this prolific pool. The No. 1 Price was drilling at 5,319 feet, July 3.

South of the Edmond Pool, Sinclair Prairie Oil & Gas Co. had run tubing in No. 1 Corbett, NE NW NE Section 17-13-3w, and washed it in on July 5. This test is a wildcat situated midway between the Edmond Pool and Britton and was very closely watched for results from the Wilcox sand at 6,645 feet to 6,706 feet, which is the second Wilcox sand. The well flowed 745 bbls. in 15 hours with gas increasing from a rate of 12,000,000 feet to 21,000,000 feet per day. The oil was cutting from 7 to 12 per cent but there was no free water. Later it flowed over 1,000 bbls. in 24 hours and it was reported that there was no water.

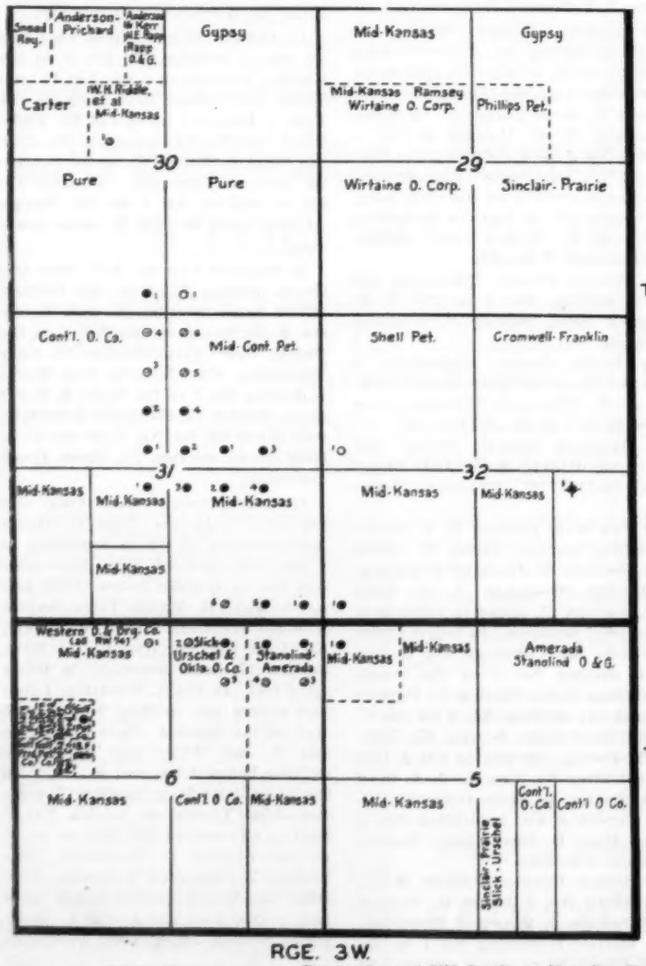
In the Britton townsite, J. E. Mabee and others were drilling at 60 feet in their No. 1 Bailey, 495 feet north and 993 feet west of the SE cor. NE ¼ Section 20-13-3w. At the present time there are four operations under way in the Britton Pool area exclusive of the Slick-Urschel and others' No. 1 Owens, discovery well for the pool.

Gypsy Oil Co. and Indian Territory Illuminating Oil Co.'s No. 1 Salisbury, a wildcat about 3 miles north and west of the Edmond Pool, was drilling at 5,012 feet on July 3.

Oklahoma City Pool

The most interesting development in the Oklahoma City Pool at the present time is centered in and around the newly extended drilling zone in the north end of the field which to date has seen one gas well and two oil wells brought in. The first producer in the zone, Phillips Petroleum Co.'s No. 1 Kennedy, 231 feet north and 940 feet west of the SE cor. NE ¼ Section 34-12-3w, has been shut in as a gas well for the past several days awaiting the results of No. 1 Great Western, a west offset of the same company's No. 1 Kennedy gauged 35,000,000 feet of gas from Wilcox sand at 6,295-6,462 feet, with total depth of 6,468 feet. No. 1 Great Western, 216 feet north and 1,140 feet east of the center of Section 34-12-3w, came in for 3,753 bbls. of oil in 24 hours on gas lift, completed in second Wilcox sand from 6,340-6,518 feet.

Champlin Refining Co.'s No. 1 Latimer, 1,020 feet north and 1,305 feet east of the SW cor. NW ¼ Section 35-12-3w, in the new drilling zone, topped the School Land sand at 6,426 feet, bailed down 4,000 feet and the hole bridged. While cleaning out the swab was run and recovered 115 bbls. of oil in six hours. Several other wells in the immediate area were shut down to wait for results of the No. 1 Latimer which operators were attempting to clean out.



—By courtesy of Mid-Continent Map Co., Tulsa.

The Edmond Pool, Oklahoma County, Oklahoma, where Pure Oil Co. brought in a 20,000-bbl. well in Section 30-14-3w, on July 4

Oklahoma Production

Estimated daily average production of Oklahoma for the week ending July 6 and for the preceding week follows:

	Barrels	
	July 6	June 29
Allen	8,000	7,750
Asher-West Asher	1,250	1,225
Burbank	8,600	8,600
South Burbank	11,250	11,250
Balance Osage	27,250	27,250
Blackwell	4,800	4,850
Bristow-Slick	9,000	9,100
Chandler	5,000	5,000
Crescent	4,650	6,350
Cromwell	4,300	4,350
Cushing-Shamrock	13,200	13,200
Duncan district	4,150	4,150
Edmond	5,025	4,075
Fish	8,525	9,350
Fitts	16,925	20,125
Gray	1,100	1,950
Graham	4,000	4,000
Healdton	9,450	9,400
Hewitt	4,800	4,800
Holdenville	1,550	1,525
Keokuk	2,125	2,125
Konawa	1,875	1,725
Lucien	10,275	11,925
Marshall-Lovell	1,050	1,050
Oklahoma City	137,075	157,225
Papoose	1,300	1,325
Polo	3,025	2,725
Sasakwa and townsite	2,000	2,400
Sholem Alechem	4,000	4,025
Seminole Field:		
Bowlegs	11,250	11,075
Carr City	4,075	6,325
Earlsboro	10,000	10,075
East Earlsboro	9,975	9,725
South Earlsboro	1,225	1,225
Little River	15,000	14,925
East Little River	825	825
Maud	1,125	1,175
Mission	3,200	3,075
Seminole	10,650	11,250
East Seminole	1,375	1,350
Searight	3,800	4,025
Total Seminole	73,175	75,050
St. Louis-Pearson	25,625	26,125
Tatums	5,000	4,975
Tonkawa-Garber-Thomas	6,000	5,975
Wewoka	3,500	3,500
Yale-Jennings	5,100	5,100
Other pools	57,625	57,625
Total	491,575	521,175

9,227 Bbls. in 24 Hours

Undoubtedly the most important completion in the field of recent days is the Phillips Petroleum Co.'s No. 2 Traders Compress, 150 feet north and 700 feet west of SE cor. SW ¼ Sec-

tion 36-12-3w, in the north end of the field but outside of the new drilling zone. This well was completed a week ago in lower Simpson formation from 6,125-6,443 feet, total depth, flowing 9,227 bbls. in 24 hours through a 2-inch choke, gas gauging 9,000,000 feet. Cellar and pits were being dug for No. 3 Traders Compress at 540 feet north and 830 feet west of SE cor. SW ¼ Section 36-12-3w.

Travis Petroleum Co. was building rig for its No. 2 Lucas, 971 feet east and 276 feet south of NW cor. SW ¼ Section 36-12-3w, Oklahoma City Pool, and Sunray Oil Co. had location staked for its No. 1 Franklin, 948 feet west and 393 feet south of the NE cor. NW ¼ Section 1-11-3w, south offset to Phillips Petroleum Co.'s No. 2 Traders Compress.

Okfuskee County

Carter Oil Co.'s No. 2 Welty, in Section 2-11-8, Dill Pool, was completed for 475 bbls. of oil in 4¼ hours' flowing through 2-inch tubing, total depth 3,935 feet.

Carter Oil Co. will attempt to extend production in the Dill Pool, one-quarter of a mile east in its No. 1 Mary Hudson, C NW SW Section 1-11-8, which is now a location.

Greater Seminole Area

Carter Oil Co. extended production one-quarter of a mile north in the North Searight Pool in Seminole County, when its No. 1 Whitney, C E half SE SW Section 7-10-6, swabbed 780 bbls. in 18 hours from 4,611 feet, total depth, 10 feet in the Wilcox sand topped at 4,601 feet.

Orval Tilley and others' No. 1 Amery, NE SW NW Section 28-7-8, east of the Fish Pool in Hughes County, encountered a small show of oil and a hole full of water in the Calvin sand 1,170-90 feet and the test was abandoned at 1,203 feet, total depth.

The Fish Pool in Seminole County, continues to account of some good producers and last week Magnolia Petroleum Co.'s No. 10 Reed, 990 feet north and 1,190 feet east of the SW cor. SE¼ Section 30-7-8, flowed 1,040 bbls. of oil in eight hours from Simpson dolomite and Wilcox sand topped 4,160 feet and 4,209 feet, respectively. Total depth was 4,210 feet.

Stanolind Oil & Gas Co. and Amerada Petroleum Corp.'s No. 2 Reed, SE SW SW Section 25-6-7, Saskawa Townsite Pool, in Seminole County, was completed in the second Wilcox sand at 4,155-90 feet, total depth, flowing 901 bbls. of oil through casing in 24 hours.

In the Sasakwa Pool in Seminole County, Stanolind Oil & Gas Co. and Amerada Petroleum Corp.'s No. 1 Rogers, NW SE NW Section 8-6-8, found Booch sand at 2,745-68 feet, good for 77 bbls. of oil in eight hours flowing natural and it was completed, total depth being 2,782 feet.

New operations started in the Greater Seminole area during the week in review were as follows: Magnolia Petroleum Co.'s No. 12 Reed, 871 feet north and 180 feet west of SE cor. Section 30-7-8, building rig; Atlantic Oil Producing Co.'s No. 1 Anderson, C NW SE Section 12-9-4, location; Sovereign Drilling Co.'s No. 1 Smith, 990 feet south and 150 feet west of NE cor. NW¼ Section 6-6-5, location.

Hughes County

Dandridge and Crane's wildcat, No. 1 Mead, NW NW NE Section 17-5-9, western Hughes County, was dry and abandoned at 1,710 feet, total depth. This test was drilled for shallow gas production and encountered only a small show of gas in sand at 1,370-90 feet.

In the Olympic Pool in northern Hughes County, Potco Oil Co. was spudding in its No. 3 Dixon, SE NE NW Section 12-9-8.

Pittsburg County

P. H. Gray and others' No. 1 Lee, NW NW SE Section 12-5-13, Pittsburg County wildcat about 6 miles west of McAlester, was abandoned at 1,210 feet on account of lost tools in the hole.

Pontotoc County

Radial Oil Co. encountered a hole full of water at 1,930 feet in its No. 3-A Simpson "A," NW NE NE Section 20-4-8, Steedman Pool, in Pontotoc County, and the well was abandoned at 2,070 feet, total depth.

Phillip Boyle's No. 1 McCracken, NE NW NW Section 31-5-4, a wildcat about 6 miles due west of the Bebee Pool, after encountering a good showing of oil at 2,160 feet and later filling up the hole with oil at 2,173 feet, pumped salt water and tubing was being pulled in order to drill it deeper. However, discouraging this might have proven to some operators, it served, apparently, to spur Mr. Boyle and he was digging cellar and pits for No. 1 Crist, a north offset to the No. 1 McCracken, SW SE SW Section 30-5-4.

A wildcat location had been staked by Franks Brothers for their No. 1 Abbott, SW NW NE Section 34-3-6, 6 miles northwest of the Fitts Pool in Pontotoc County.

Kiowa County

East of Hobart in Kiowa County, Rajah Oil Co.'s No. 3 Stone, C SE NE Section 34-7-17w, was expected to start drilling out cement plug this week after setting 6-inch casing at 880 feet. Total depth is 1,040 feet and it is reported Simpson formation from 1,017-34 feet, which was acidized, had a small show of oil with some water. Operators claim the water is coming from behind the pipe and the test is causing no little excitement.

Fitts Pool Results

Five wells in the Fitts Pool in Pontotoc County were placed in the completions list the past week. Phillips Petroleum Co.'s No. 11 Norris, NE NW SW Section 25-2-6, had Bromide first, 4,210 feet, second 4,285-4,311 feet, total depth, and on June 27 flowed 806 bbls. of oil the first hour through casing, gauging 8,000,000 feet of gas. It then flowed 172 bbls. of oil the second hour through tubing, increasing to 188 bbls. of oil the next hour through tubing.

Moore and others had recompleted their No. 7 Craddock, NE SW SW Section 29-2-7, deepening it from 4,121 feet to 4,252 feet, total depth, in limestone. Although this test drilled several feet into the McLish formation topped at 4,116 feet, it is not a McLish sand producer, production coming from the Bromide formations, 4,000 feet and 4,065 feet, respectively, flowing 180 bbls. of oil the first hour, 140 bbls. the second hour and 150 bbls. the third, through casing.

E. H. Moore and others had completed their No. 2 Harper, SE SW NE Section 29-2-7, for 526 bbls. of oil the first hour, 426 bbls. the sec-

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ond and 403 bbls. the third hour through casing. Production is from the first and second Bromide sands logged at 4,100 feet and 4,190 feet. McLish lime was at 4,248 feet and total depth is 4,200 feet.

E. H. Moore and others' No. 3 Showers, NE SW NW Section 29-2-7, flowed 572 bbls. of oil the first hour, 481 bbls. the second, 477 bbls. the third and 536 bbls. the fourth hour through casing on its completed gauge. Bromide lime, 4,050 feet; first sand, 4,156 feet; second sand, 4,200 feet; McLish lime, 4,265-74 feet, total depth.

Amerada Petroleum Corp. extended production in the Fitts Pool one-half mile east when its No. 1 George Smith, SE SW NW Section 28-2-7, flowed 1,601 bbls., potential gauge, from the Bromide sands. Bromide lime was logged at 3,923 feet; first sand, 4,035 feet; second sand, 4,117 feet, and McLish lime 4,140-54 feet, total depth. Considerable difficulty was had in bringing this well in on production. It was finally given a 3,000-gallon acid shot and then established its potential flow. Although this producer is somewhat smaller than the average well in the pool, it definitely proves the potential value of the east side and no doubt producers of greater capacity will be drilled in the area.

J. G. Catlett had cellar and pits dug for his No. 1 Smith, SW SW NW Section 28-2-7, a west offset to the Amerada's No. 1 Smith.

Altus District

J. Garfield Buell's No. 1 Kizziar, SE SE NE Section 2-2-22w, Altus district, Jackson County, encountered 350 feet of water in Granite Wash 2,480 to 2,504 feet, total depth, and it was shut down for orders.

Wilson and Walker Oil Co.'s No. 1 Hardcastle, NE NE SW Section 15-1-20w, Jackson County, got a hole full of water in a lime drilled from 2,092-2,101 feet and was drilling ahead at 2,110 feet.

Selby Oil & Gas Co.'s No. 1 Cobb, NE NW NE Section 22-1-20w, found granite wash at 1,530-68 feet with a show of oil and was drilling at 1,590 feet. This test originally produced about 14 bbls. daily in the wash formation bottomed at 1,140 feet, but production fell off to around 5 bbls. daily and it is being deepened.

Gypsy Oil Co.'s No. 1 Boucher, NW SW SW Section 32-1-19w, Jackson County, was drilling at 2,295 feet.

New operations started during the week in the Altus area were: Guy Brock and J. C. Clower's No. 1 Cole, SW SE NE Section 34-2-20w, rig up; Gypsy Oil Co.'s No. 1 Southall, SW cor. Section 2-1-20w, drilling 730 feet.

Comanche County

Ashcraft and Palmer's No. 3 School Land, NE SE SE Section 20-2-10w, Lawton district in Comanche County, was completed for 70 bbls. of 33 gravity oil first 24 hours, production coming from granite wash logged at 835-58 feet and total depth at 883 feet.

Stephens County

In the north Duncan district of Stephens County, Morgan Petroleum Co.'s No. 1 Calloway, SE NE NE Section 17-1-8w, was abandoned at 2,579 feet, total depth. Small gas showings were had at 2,190 feet and 2,368 feet.

Bridwell Oil & Gas Co. completed for 58 bbls. of oil first 24 hours its No. 1 Nigh, NE SE SW Section 11-2s-8w, Comanche Pool, production coming from sand 2,035-2,044 feet, total depth.

J. W. McAllister's No. 2 Nigh, SE NE SW Section 11-2s-8w, had sand 2,049-64 feet, total depth, which flowed 20 bbls. of oil and 5,000,000 feet of gas for its completed gauge.

George Pace and others were rigring up for a semiwildcat in their No. 1 Randel, SW SW NE Section 22-2s-7w, Stephens County.

George Pace and others had location staked for their No. 1-A Damron, SE SE SW Section 25-2s-6w, semiwildcat in the Woolsey Pool area of Stephens County.

Grady County

T. H. McCasland had completed his No. 1 Slusher, NE NE SE Section 28-3-5w, Knox Pool, in Grady County, in sand 2,438-2,471 feet, pumping 25 bbls. of oil first 24 hours. Total depth was 2,660 feet.

Cotton County

Shasta Oil Co.'s No. 1 Cobb, NW NE SW NE Section 2-2s-10w, Walters district of Cotton County, pumped 27 bbls. of oil first 24 hours from sand 2,134-54 feet, total depth, and it was completed.

Jefferson County

G. W. Hewell and others had staked location for No. 1 Currey, SE SE SW Section 36-4s-9w, near the Texas state line in southern Jefferson County and in wildcat territory.

Carter County

Evans & Groves' No. 4 Ratliff, east of the Tatum Pool in Carter County, 1,080 feet north and 510 feet east of the SW cor. Section 28-1s-2w, was dry and abandoned at 578 feet, in shale. A small showing of oil was had in a sand found at 508-31 feet.

In the Tatum Pool, Paul Robb and others encountered broken sand and sandy shale from 2,213 to 2,424 feet, total depth, in their No. 4 Burton, CWL SW NE Section 31-1s-2w, which was good for 130 bbls. first 24 hours swabbing. It was completed.

Samedan Oil Co. completed its No. 6 Trahern (also known as No. 1 Clark), CWL SE NW Section 21-1s-2w, in broken sand series from 2,212 to 2,445 feet, total depth, for 70 bbls. of 26 gravity oil first 24 hours flowing.

Johnston County

Nearly 5 miles southwest of Tishomingo in Johnston County, M. A. Neff and R. A. Godfrey were rigging up their No. 1 R. Ford, NE SE NW Section 13-4s-5e, a wildcat on a surface and core drill structure.

Marshall County

Bland and others had abandoned at 570 feet their No. 2-A Godwin in the SE cor. Section 10-6s-6, Marshall County.

Centrop Oil Co. had deepened from 505 feet to 517 feet its No. 2 Minter, SW cor. Section 30-7s-6e, Isom Springs Pool in Marshall County, and at the latter depth the well pumped 25 bbls. of oil and 25 bbls. of water first 24 hours on its completed gauge. Production was increased from 3 to 25 bbls. after deepening.

In the Enos Pool in Marshall County, Centrop Oil Co. made location for its No. 2 Walker, 495 feet south and west of the NE cor. Section 35-7s-5, and the Levelle Coal Co. had made location for its No. 9 Eppler, 765 feet north and 165 feet west of the SE cor. NE quarter Section 36-7s-5e.

Osage County

During the week in review Osage County accounted for one oil well and two dry holes and eight new wells started, four being in the South Burbank Pool. A separate accounting follows:

Norbla Oil Co. completed its No. 1, NE SW SE Section 29-26-11, for 10 bbls. of oil daily in sand at 1,555-1,575 feet with total depth being 1,580 feet.

In the Naval Reserve Pool, Lewis Production Co. completed as a dry hole at 2,736 feet its No. 5, NE SE SW Section 21-24-7. A hole full of water was encountered at 2,736 feet after Bartlesville sand from 2,565-97 feet responded with 15 bbls. of oil on the pump after a 30-quart shot of nitro.

Norbla Oil Co.'s No. 2, 560 feet north and 780 feet east of the SW cor. of Section 4-20-10, had a dry sand from 398-400 feet and the test was abandoned at 404 feet, total depth.

Carter Oil Co. and others had made locations for two additional wells in the unit block in the South Burbank Pool. These were No. 10 Skelly Ducotey, in the SW NW SW and No. 11 Skelly Ducotey in the NW SW SW of Section 3-25-6.

Champlin Refining Co. announced two more locations on its Fletcher tract in the South Burbank Pool—No. 4 in the NE SE SE and No. 5 in the SE NE SE, both in Section 4-25-6.

Other Osage County new locations were: Philtex Oil Co.'s No. 58, located 1,290 feet south and 170 feet east of the NW cor. Section 22-25-12, and Lewis Production Co. and Continental Oil Co.'s No. 11, NW NW SW Section 16-24-7. Ray Branstetter had a rig up for his No. 3, SW SW SE Section 28-22-11.

Kay County

Otstott Development Co. and Blackwell Oil & Gas Co. were preparing to deepen No. 1 School Land, NW cor. Section 16-27-1w, in the old Blackwell

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Pool of Kay County. Total depth is 3,460 feet.

Pawnee County Failure

Offsetting to the east of the discovery well in the Marathon-Gilbert Pool in Pawnee County, Marathon Oil Co.'s No. 1 Gilbert-Account No. 2, NW cor. Section 19-22-3, encountered only a small show of oil and 300 bbls. of water in the first and second Wilcox sands logged at 4,419 feet and 4,455 feet, respectively, and the test was abandoned. Total depth of the hole was 4,847 feet, with Silliceous lime topped at 4,753 feet.

It is recalled that the discovery well had Wilcox sand from 4,449-4,474 feet, total depth, which yielded 260 bbls. of oil flowing natural, but cutting 2 per cent b.s. and water.

Canadian County

Between El Reno and Oklahoma City the wildcat test of R. Carl Larkin's No. 1 Province, in the NW NW NE Section 33-13-5w, had been abandoned at 7,748 feet, total depth, in Mississippi lime topped at 7,708 feet.

Noble County

Noble County's big threat of recent days, Midco Oil Co.'s No. 1-A Yost, NE NW NE Section 22-23-2w, in the Billings Pool, insists on making spasmodic attempts at commercial production but to date has persistently gone dead after relieving itself of various amounts of crude. On July 1 it flowed 560 bbls. of oil and 140 bbls. of water in seven hours and was flowing at the rate of 25 bbls. of oil and 4 bbls. of water per hour when it suddenly quit flowing. Production is coming from the Arbuckle lime at 4,250-57 feet and operators were cleaning out at 4,224 feet.

In the south end of the Lucien Pool in Noble County, Magnolia Petroleum Co.'s No. 1 Sharp, C SW SW Section 34-20-2w, was completed in the first Wilcox sand, flowing 229 bbls. of oil in six hours. The second Wilcox sand was nonproductive and the test was plugged back to 5,039 feet in the first sand topped at 5,034 feet, where it was shot with 20 quarts of nitro and acidized with 1,000 gallons of acid, neither of the treatments increasing the rate of production. This well is a west offset to the No. 1 Fuller, discovery well in this particular spot of the Lucien Pool.

Gypsy Oil Co. was building rig on a location 930 feet north and 660 feet east of the SW cor. of the SE quarter Section 33-20-2w, Lucien Pool, for its No. 1 Pfeiffer.

Location was staked during the week by Stanolind Oil & Gas Co. for its No. 1 Sharp in the C NW NW Section 34-20-2w, Lucien Pool in Noble County.

Logan County

On a block of acreage comprising 1 square mile and participated in by the Texas Co., Stanolind-Amerada, Gypsy Oil Co. and Shell Petroleum Corp., the Texas Co. as operator has made a location for No. 1 Wood in the SW SW NE Section 34-15n-4w. The location has been subjected to seismology and is a wildcat location on the Nemaha Granite Ridge in the Navina high area about 6 miles northwest of the Edmond Pool. Possibly this will be the "eureka" well of the area.

Continental Oil Co.'s No. 1 Hildreth in Section 22-15n-3w, Seward Pool area, was drilling plugs last Thursday, July 4, preparatory to a test. Total depth was 6,246 feet in Wilcox sand encountered at 6,217 feet. This test is one-half mile west of the Sinclair Prairie Oil & Gas Co.'s No. 1 Koatsch, discovery well for the pool, and should do much to prove the area. Sinclair Prairie is still working on the Koatsch in an effort to increase its production, and the same company is drilling below 2,550 feet in its No. 1 Glenn, NE NE SE Section 27-15-3w.

The Gypsy Oil Co. is reported to be making a location for a south offset to the Continental Oil Co.'s No. 1 Hildreth. Location will be the NE NE NW Section 27-15-3w.

Lincoln County

What will be Stanolind-Amerada's second attempt for a producer on their seismographed block northwest of the Chandler Pool in Lincoln County, will be their No. 1 Purcell. NW cor. Section 4-14-3. The first test on this block of nearly 700 acres resulted in a 5,100-foot Wilcox sand dry hole in the SW NW of Section 3-14-3.

Stanolind-Amerada were rigging up rotary tools to deepen to the Wilcox sand their No. 1 Cavanaugh wildcat in Section 31-15-5, northeast of Chandler in Lincoln County. At a total depth of 3,660 feet drilling was stopped for a test of the Prue sand which indicated possibilities of commercial production but failed.

Hebron Area, Potter County, Has 27,000,000-Foot Gas Well

By R. C. CONINE

COUDERSPORT, Pa., July 8.—Genesee Township's extension of the Hebron (Potter County) Field contributed a 27,000,000-foot-a-day producer for the only favorable completion in the Pennsylvania deep gas sand area and the adjacent New York fields in the week ending July 5. This was Updegraph's Theodore Cobb, total depth 5,080 feet, in which the Tully sand was reached at 5,067 feet and first gas at 5,073 feet. J. B. Reed abandoned the test on the George C. Page farm, Allegany Township, Potter County.

Pennsylvania Operations

East Penn Development Co. was down 3,956 feet on the Clarence Cooley farm, Lawrence Township, Tioga County, and drilling at 2,253 feet on the Ray French farm, Clymer Township. Cowanesque Gas Co. was drilling at 4,883 feet on the W. A. Furman farm, Allegany Township, Potter County. Hanley & Bird were drilling at 2,055 feet on the George Burd farm, same township. Williamsport Natural Gas Co. was drilling at 2,230 feet on its No. 1 Hile-Ellis-Cobb, Genesee Township. Sylvan Natural Gas Corp. was drilling at 3,055 feet on the Merle A. Hill farm, same township. Penn United was fishing at 5,088 feet on the Charles Morris farm, same township. Wyoga Oil & Gas Co. was drilling at 2,962 feet on its No. 3 Tassell, Hebron Township.

Stocum and others were drilling at 2,720 feet on the L. Thompson farm, Genesee Township, Potter County. Sylvania was drilling at 3,755 feet on its No. 3 Z. L. James, Allegany Township. Godfrey L. Cabot, Inc., was drilling at 300 feet on the A. G. Lyman farm, Ulysses Township, same county. Same company was drilling at 350 feet on the Robert R. Lewis farm, Allegany Township. United Producers was drilling at 1,690 feet on its No. 2 Katherine Currier, same township. Penn York was shut down at 690 feet on the William Cobb farm, same township. Potter Development Co. was drilling at 620 feet on the F. Robbins farm, Bingham Township. New York State Natural Gas Co. was spudding at 60 feet on the A. Bishop farm, Allegany Township. William Snee's deep test on Summit Hotel property, South Union Township, Fayette County, was shut down at 3,961 feet.

New York Operations

Trumbull was shut down at 1,000 feet on the W. B. Lasher farm, Throop Township, Cayuga County. Southwestern Natural Gas Co. was drilling at 2,375 feet on the T. Moran farm, Alma Township, Allegany County. Godfrey L. Cabot was drilling at 2,600 feet on the B. Barringer farm, Belfast Township. Cunningham Natural Gas Co. was drilling at 2,850 feet on the Colligan farm, Alma Township. Belmont Quadrangle Development Co. was drilling at 2,565 feet on the Van Copen and Whiteman farm, Willing Township. Schrack and others were drilling at 665 feet on the M. Loring farm, same township. Sanderson and others were drilling at 2,957 feet on the Leon Bennett farm, Granger Township. Wyoming Natural Gas Co. shut down at 1,783 feet on C. H. Caulling farm, York Township, Livingston County.

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Southwest Texas District

By STAFF CORRESPONDENT

FAVORABLE WILDCAT SHOW MAY OPEN POOL IN NUECES

SAN ANTONIO, Tex., July 8.—The favorable showing of a wildcat in Nueces County that may open a field, and the apparent discovery of a deeper producing horizon in the Angelita Field in San Patricio County were the main developments in Southwest Texas.

Five miles south of Clarkwood in the J. S. McGregor Survey, Nueces County, Magnolia Petroleum Co.'s No. 1 J. C. Baldwin, encountered oil sand from 3,871-75 feet and on a 15-minute drill stem test from 3,866-75 feet tested 1,800 feet of pipe line oil through a one-quarter inch choke on bottom and a five-sixteenths inch choke on top, with a slight show of salt water. Casing has been cemented and it is scheduled to be tested this week.

Prior to the drill stem test which showed some salt water, the test had created a considerable lease play, with Magnolia Petroleum Co. the principal purchaser of acreage. It is reported the company acquired an additional 1,600 to 1,700 acres at an average cost of $10 per acre and agreed to drill another test.

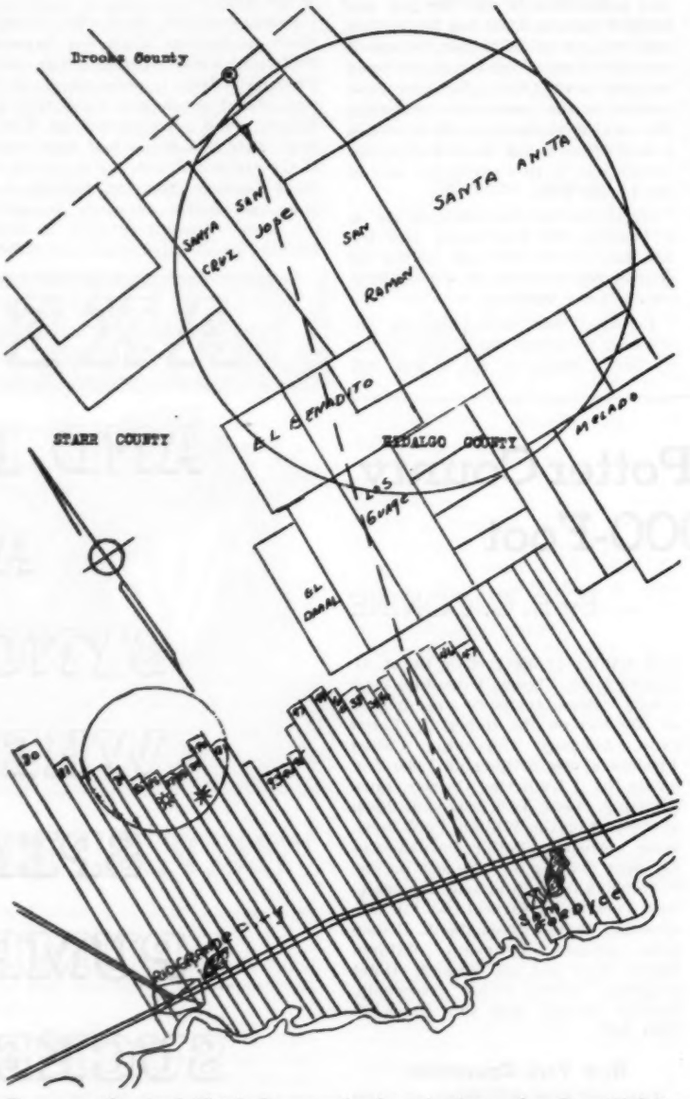
As the well is south and slightly west of the Saxet Field which produces from sands at 4,200 and 4,800 feet it is believed to have opened a new producing horizon.

Saxet

In the Saxet Field, Nueces County, Texon Royalty Co.'s No. 1 Isensee in the J. Ward Survey cored sand with an odor of oil from 4,853-55½ feet and oil sand from 4,855½-56 feet and 4,856-57 feet, total depth. On a 20-minute drill stem test from 4,850-57 feet it tested 25 pounds of pressure and 41 thribbles of pipe line oil and one joint of drilling mud. The operators were preparing to make an electrical coring test after which casing will be cemented preparatory to testing.

Angelita

A deeper producing sand for the Angelita Field in southern San Patricio County looms at Atkins, O'Neil and Continental Oil Co.'s No. 3 Welder, due to a drill stem test from 5,547-61 feet that tested 9½ fourbles of oil and 5½ fourbles of salt water through a one-quarter inch choke on top and bottom. The hole was reamed down and another test from 5,555-61 feet showed 3 fourbles of mud cut with oil and 6 fourbles of salt water through a one-quarter inch choke. It is reported the operators will core 10 to 12 feet more and run an electrical coring test after which casing will be cemented on bottom and a test made through perforated casing. At its present depth it is over 200 feet deeper than the producing horizon in the discovery at approximately 5,300 feet. Provided it makes a producer it will revive interest in this area, which has only one producing well, although more than six tests have been drilled.



Two geophysical "highs" recently found along the Starr-Hidalgo County line, Southwest Texas, are indicated by circles

Goliad

Ten miles south of Goliad and 3 miles east of Berclair in Goliad County, Keystone Royalty Co.'s No. 1 Woods is being completed for a gas well, after the drill stem became stuck in the hole when the well tried to blow out last week. The hole is bottomed in sand from 5,956-61 feet. After it had been shut in for two hours with the pressure building up to 500 pounds, it was opened on a three-eighths inch choke and the pressure dropped to zero with the well blowing an estimated 1,000,000 feet of dry gas with a good petroleum odor. Location is in the J. Sherman Survey.

Plymouth

In the Plymouth Field, San Patricio County, Plymouth Oil Co.'s No. 4-C Welder cored oil sand from 5,623-39 feet and on a 12-minute drill stem test showed 150 pounds of pressure with 2,000 pounds of pipe line oil through a one-quarter inch choke on bottom and a five-sixteenths inch choke on top. Casing was cemented on the top sand and the plug was being drilled late in the week.

Loma Alta

The Loma Alta Field in southern McMullen County received its first setback when Darby Petroleum Co.'s No. 1 Hagist, a diagonal offset to the discovery, failed to show anything of importance in the discovery sand at 2,212 feet and is drilling to test the Government Wells sand and the Pettus sand. Offsetting its discovery to the east in Survey No. 113, Texio and Illinois Petroleum Co.'s No. 2-A Atkinson was preparing to test in the discovery horizon at approximately 2,200 feet.

McNeil

Lion Oil & Refining Co.'s No. 8 P. E. McNeil, a north outpost test in the McNeil Field, Live Oak County, has the appearance of making one of the best producers to be completed in the field. Bottomed in sand at 4,381 feet, a three-minute drill stem test was made from 4,363-81 feet, the total depth, and it flowed pipe line oil through a one-half inch choke on bottom. Casing is being cemented on top.

Loma Novia

In the Loma Novia Field, Duval County, Duval Oil Corp.'s No. 1 Moody in Survey 76, cored oil sand from 2,668-74 feet and was completed at a total depth of 2,692 feet for an initial production of 18 bbls. of pipe line oil per hour through a one-half inch choke, with tubing pressure 200 pounds. Humble Oil & Refining Co.'s No. 2 Hubbard cored oil sand from 2,794-2,804 feet, total depth, and is preparing to test after 7-inch casing had been cemented at 2,794 feet. Seven new locations were made.

In the same county, A. E. Masterson is reported to have taken a large block of acreage consisting of the Rogers ranch in Surveys 7, 277, 275, 273 and 8 and adjoining surveys and will drill a 5,000-foot test.

Gonzales-Caldwell

J. J. Elam has assembled a block in Gonzales and Caldwell Counties, about 5 miles east of Luling, and will drill to the Navarro or Edwards lime. The block is northeast of Empire Gas & Fuel Co.'s No. 1 Norwood in Gonzales County, drilled several years ago, that produced considerable oil from the Taylor marl. Location is over the line in Caldwell County in the B.S.&F. Survey.

Pearsall

Amerada Petroleum Corp.'s No. 1 Kothmann, one-half mile south of production in the Pearsall Field, Frio County, made nothing but salt water when tested at 3,961 feet. It had been reported to have cored a good body of oil sand from 3,957-61 feet, in the Navarro sand, the main producing horizon. The well is shut down and it is not known whether it will be abandoned or drilled to the Edwards lime. The company's No. 1 Smith, which tested dry in the Navarro sand, is drilling in lime below 5,930 feet. It is in the J. V. Mason Survey.

Rocky Mountain Area

SECOND WELL IN MONUMENT SHORT OF OUTPUT IN OFFSET

By
T. R. INGRAM

DENVER, Colo., July 8.—Shell Petroleum Corp.'s No. 1 State, in the new Monument Pool, Lea County, New Mexico, fell short of the record of the well it offsets and made only 49 bbls. an hour after treating with 6,000 gallons of acid. Two completions and five new locations were reported in the Eunice area. The best was Amerada Petroleum Corp.'s No. 1 Houston, which proved a half mile on the north. Three completions were reported in the Cooper Pool, the best being Texas Co.'s No. 3 Ogg for 121 bbls. an hour. Simms Oil Co.'s No. 1 Woolworth, near the edge of the east side, made only 8 bbls. an hour with gas and is shut down for orders. Three locations, all flank wells, were made in the Hobbs Pool. Three wildcats in the Lea area are showing water and are shut down for orders. These are Jeffers Oil Co.'s No. 1 Jiminez and No. 1 Etz, and Anderson & Prichard's No. 1 Fisher. The rig on Barnsdall Oil Corp.'s No. 2 Dodd, in Eddy County, was destroyed by fire, as the well was being completed for an estimated production of 100 bbls. a day.

Ramsey Petroleum Corp. has spotted a located for a deep test in Elbert County, eastern Colorado, on a block of 30,000 acres north of Limon. There were no completions in Colorado.

Wyoming had two completions, a 100-bbl. well in the Oregon Basin Field in Park County; Texas Co.'s No. 3 Sonners, which increased to 250 bbls., and a 5-bbl. well at 200 feet in the Osage Field, opening a new shallow horizon on the east side.

Texas Co.'s No. 1 Aaronson, a semi-wildcat on the west side of Cut Bank, Montana, pumped 8 bbls. in 13 hours, marking an extension. Two new locations were reported in Cut Bank and one in the Kevin-Sunburst Field.

NEW MEXICO

Monument Area—Lea County

Shell Petroleum Corp.'s No. 1 State, C SE SE Section 35-19-36, an offset on the west to Amerada Petroleum Corp.'s No. 1-F State, second well completed in the Monument Pool, was listed as a completion this week at 3,929 feet, total depth, and made 49 bbls. an hour through 2½-inch at 3,922 feet with 1,500,000 feet of gas after treating with 4,000 and 2,000 gallons of acid. It appears to be running low and failed to approach the record of the well it offsets. Elevation is 3,594 feet and pay was found at 3,912-29 feet. Amerada's No. 1-F State made 1,060 bbls. in two hours through tubing from pay at 3,805-3,903 feet after acidizing with 2,000 gallons. Elevation is the same as the Shell well.

Amerada Pet. Corp.'s No. 1 Andrews, W NW NW Sec. 12-20s-36.
Spud. June 23; T.D. 174 ft. in red beds; 12½-in. at 163 ft. with 100 sacks; W.O.C.

Jeffers Oil Co.'s No. 1 Britt, C SE NW Sec. 7-20-37.
Drlg. 240 ft. in red beds; 15½-in. at 72 ft. with 17 sacks.

Shell Pet. Corp.'s No. 1-E State, C SE SE Sec. 35-19-36.
T.D. 3,929 ft.; testing.

Twin States Oil Co.'s No. 1 Weir, C NE SE Sec. 35-19-36.
T.O. 2,382 ft. in lime; 9⅝-in. at 2,334 ft. with 500 sacks; W.O.C.

Superior Oil Co.'s No. 1 State, C NE NE Sec. 2-20-36.
Drlg. 3,026 ft. in gray lime; slight show of gas at 2,817-31 ft.

Texas Co.'s No. 1 Saunders, C SE SW Sec. 19-19-37.
T.D. 3,850 ft.; reaming after drill stem test at 3,562-3,760 ft., showing 4,385,000 ft. of gas in 1 hr.; at 3,760-3,850 ft. showed 200,000 ft. of gas and 920 ft. of drilling fluid in 70 min.

Eunice Area

Two completions and five new locations were reported in the Eunice area. One completion proves a half mile on the north. This is Amerada Petroleum Corp.'s No. 1 Houston, C SE NE Section 7-21-36, half a mile north of Gypsy Oil Co.'s No. 1 Houston and the same distance west of Continental Oil Co.'s No. 1-B Meyers. It was completed at 3,833 feet and made 377 bbls. in 10 hours through tubing on a 1-inch choke with 1,750,000 feet of gas, after treating with 2,000 gallons. Pay was at 3,822-33 feet and elevation is 3,603 feet. The 7-inch was set at 3,745 feet and 2½-inch at 3,825 feet.

Skelly Oil Co.'s No. 3-B State, C NE NW Section 16-21-36, proves one 40-acre unit on the east side. It was completed at 3,893 feet and flowed 200 bbls. in five hours through 2½-inch on a three-quarters inch choke with 1,250,000 feet of gas. It was not acidized. Pay was at 3,820-93 feet and elevation is 3,599 feet. The 7-inch was set at 3,755 feet and the tubing at 3,891 feet.

Two of the seven new locations are semiwildcats. Jim Murray's No. 1 Wallace, SW SW NW Section 3-21-36, is a mile northeast of the nearest producer, and Twin States Oil Co.'s No. 1 Record, NW Section 22-22-36, is one-third of a mile south of Ohio Oil Co.'s No. 1 State-McDonald, in the southern extension recently opened.

Atlantic Oil Prod. Co.'s No. 2-C State, C SE SE Sec. 5-21-36.
Spud. June 15 to 83 ft.; set 12½-in. at 81 ft. with 125 sacks; bldg. rotary rig.

Atlantic Oil Prod. Co.'s No. 1-G State, C SE SW Sec. 5-21-36.
Drlg. 3,100 ft.; base of salt 2,595 ft.; top brown lime 2,710 ft.

California Co.'s No. 1 State, Location 2, C SW SE Sec. 20-21s-36e.
Rigging up rotary.

Continental Oil Co.'s No. 20-C-5 State, C SW SW Sec. 20-21-36.
T.D. 3,932 ft.; pay at 3,869-3,932 ft., flowed 150 bbls. in 1 hr. through csg. with 22,000,000 ft. of gas; testing.

Continental Oil Co.'s No. 9-B-4 Meyers, C NE NW Sec. 9-21-36.
T.D. 3,704 ft. in lime; running 5½-in.; drill stem test at 3,655-3,705 ft., 1,000,000 ft. of gas in 20 minutes.

Empire G. & F. Co.'s No. 1-C State, NW NW SW Sec. 16-21-36.
Drlg. 3,514 ft. in lime.

General Crude Oil Co.'s No. 1-O State, C NW SW Sec. 32-21-36.
S.D. 70 ft.

Gypsy Oil Co.'s No. 1 Orcutt, C SE NW Sec. 5-21-36.
Rig.

Humble O. & R. Co.'s No. 5-B State, C SW NE Sec. 29-21s-36e.
Cellar and pits.

Humble O. & R. Co.'s No. 4-B State, C NW NE Sec. 29-21-36.
Drlg. 2,692 ft. in anhyd.; 9⅝-in. cmtd. at 2,944 ft. with 800 sacks.

Jim Murray's No. 1 Wallace, SW SW NW Sec. 3-21s-36e.
Location.

R. Olson et al's No. 1 State, C NW SE Sec. 5-21s-36e.
Location.

Ohio Oil Co.'s No. 1 State-Maxwell, C NE NW Sec. 16-22-36.
Rig up.

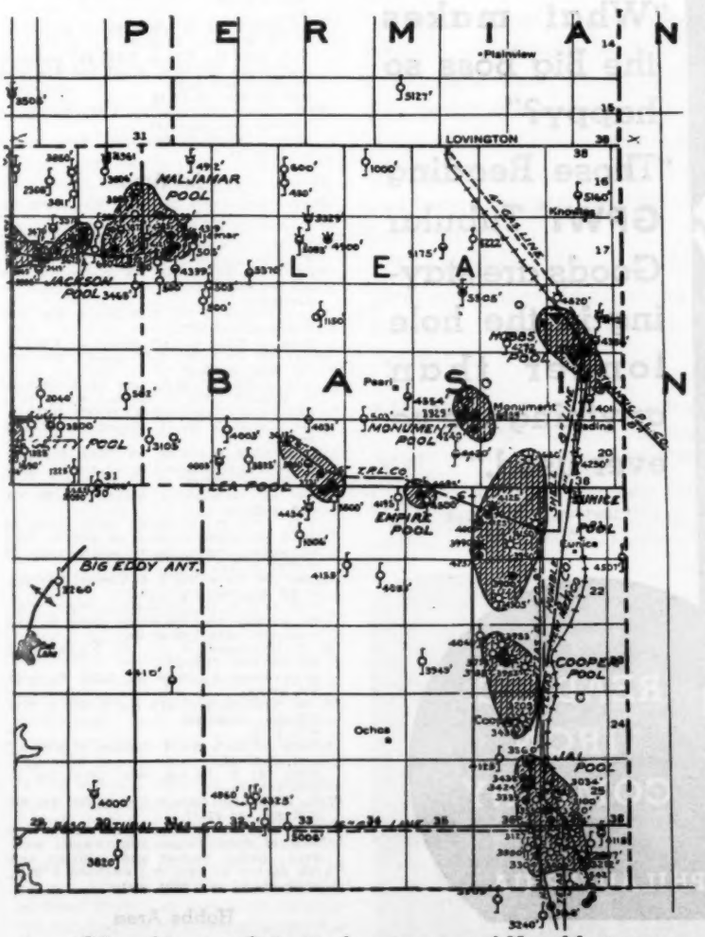
Phillips Pet. Co.'s No. 1 Woolworth-Group 2, C SW SW Sec. 6-22-37.
Location.

Renolle Oil Co.'s No. 3 Adkins, SW SW SE Sec. 9-21-36.
Cellar and pits.

Shell Pet. Corp.'s No. 1-A State, C SE NE Sec. 12-21-35.
T.D. 4,404 ft.; P.B. to 3,926 ft.; shot and cleaned out to 3,904 ft.; on 4-day test swabbed 65 bbls. oil and 10 bbls. of water per day; preparing to put on pump.

Shell Pet. Corp. and Devonian Oil Co.'s No. 2 State, C NW NE Sec. 20-21s-36e.
Cellar and pits.

Texas Pacific Coal & Oil Co.'s No. 6-A State, C SE SW Sec. 9-22-36.
Rig up.



Oil and gas pools in southeast corner of New Mexico

Cooper Area

Three completions, two of which were reported last week as having reached the sand and testing, and two new locations were reported in the Cooper Pool. Amerada Petroleum Corp.'s No. 2 Isbell, C NE NE Section 15-24-36, an offset to its No. 1 Isbell, was completed at 3,595 feet, and flowed 496 bbls. in four hours through 2½-inch with packer at 3,566 feet on a 1-inch choke, with 1,400,000 feet of gas. Pay was at 3,588-95 feet and elevation is 3,390 feet. The 7-inch was set at 3,546 feet. It was acidized.

Texas Co.'s No. 3 Ogg, C NE NE Section 34-24-36, flowed 121 bbls. per hour open with 175 pounds back pressure from pay at 3,490-3,515 feet. The 2-inch is at 3,511 feet and the 7-inch at 3,303 feet. Elevation is 3,304 feet.

Simms Oil Co.'s No. 1 Woolworth, C SE NE Section 35-24-36, on the east side and near the edge, was completed at 3,466 feet. The best gauge made was 8 bbls. an hour through 2½-inch on a 48/64-inch choke with 600 pounds pressure on the tubing, with 10,000,000 to 20,000,000 feet of gas. It is shut down for orders.

One of the new locations is important, Humble Oil & Refining Co.'s

Compact, Tamper-Proof Sturdy, Indestructible

FULTON Spring-Type High-Pressure REGULATOR

WHERE high pressure on a line makes it inadvisable to operate with a single regulator between line and user, the Fulton Spring Type High Pressure Regulator serves perfectly. Inlet pressures up to 300 pounds are reduced to any desired pressure between 10 and 50 pounds. Heavily and strongly built, yet this regulator is easy and economical to transport because of its compactness. It can be quickly installed and is very dependable in use. For exposed and out-of-the-way locations it is especially desirable because less subject to meddling than other types of regulators. Descriptive leaflet No. 118 is available. Catalog of Chaplin-Fulton regulators—40 types, for all requirements of gas control—will be mailed on request.

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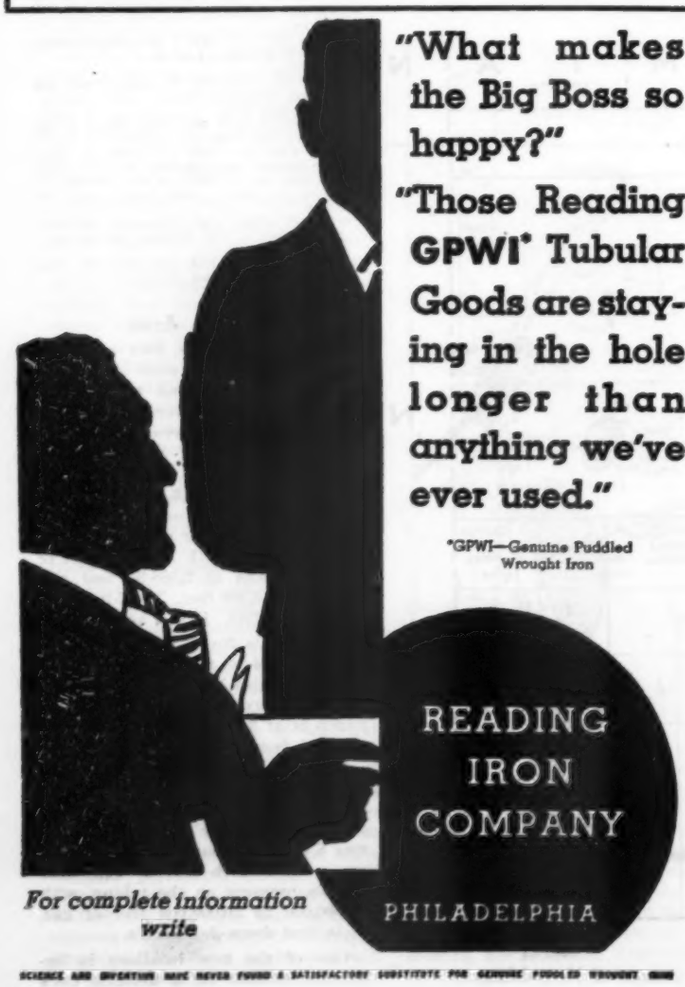
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SCIENCE AND INVENTION HAVE NEVER FOUND A SATISFACTORY SUBSTITUTE FOR GENUINE PUDDLED WROUGHT IRON

No. 3 Coats, C NW NW Section 10-24-36, half a mile west of its No. 1 Coats, which in turn was more than a mile north of the nearest producer. It is digging cellar and pits. No. 1 Coats went wild last fall and after the fire was extinguished the gas escaping from relief holes caught fire. It finally was completed last month as a large oil well.

Amerada Pet. Corp.'s No. 3 Everett, C NE SE Sec. 34-24-36.
Drlg. 3,265 ft. in lime.

Amos G. Carter et al's No. 1 Matti, C SE NW Sec. 3-24-37.
Drlg. 3,850 ft. in lime, 2,000 ft. of oil in hole; est. at 30 bbls.

Atlantic Oil Prod. Co. and Kirby Pet. Co.'s No. 1 Woolworth, C SW NE Sec. 26-24-26.
Drlg. 1,600 ft. in salt; 9⅝-in. at 1,549 ft. with 500 sacks; top anhydrite 1,210 ft.

Continental Oil Co.'s No. 14-A-5 Vaughn, C NW NW Sec. 14-24-36.
Moving in.

Continental Oil Co.'s No. 14-A-4 Vaughn (formerly No. 14-4-A). S NW SW Sec. 14-24-36.
Location.

Continental Oil Co.'s No. 14-A-3 Vaughn, C SW NW Sec. 14-24-36.
T.D. 3,475 ft. in lime; cmtd. back to 3,000 ft. to straighten.

Continental Oil Co.'s No. 15-A-3 Vaughn, C NE SE Sec. 15-24-36.
Drlg. 3,240 ft. in lime; gas shows at 3,110-28 and 3,140-49 ft.

Continental Oil Co.'s No. 15-A-2 Vaughn, C SW SE Sec. 15-24-36.
Location.

Continental Oil Co.'s No. 23-A-2 Gates, C NW NW Sec. 23-24-36.
Rig.

Humble O. & R. Co.'s No. 2 Coats, SWL NW NE Sec. 10-24-36.
Drlg. 3,454 ft. in lime.

Humble O. & R. Co.'s No. 1 Cooper, C SE NW Sec. 14-24s-36e.
Cellar and pits.

Humble O. & R. Co.'s No. 1 Mosely, C SE SE Sec. 10-24-36.
Rigging rotary.

Humble O. & R. Co.'s No. 3 Coats, C NW NW Sec. 10-24s-36e.
Cellar and pits.

Humble O. & R. Co.'s No. 1 Thomas, C SW SE Sec. 23-24-36.
T.D. 3,606 ft.; plugged back to 3,470 ft.; drilled deeper to 3,500 ft.; drill stem test 45 bbls. in 1 hr.; est. at 60 bbls. per hr. natural; cmtd. 7-in. at 3,400 ft. with 175 sacks; W.O.C.

Skelly Oil Co.'s No. 1 Coats, C SW SE Sec. 3-24-36.
Rig.

Stanolind O. & G. Co.'s No. 4-A Meyers, C NE NW Sec. 22-24-36.
T.D. 3,605 ft.; P.B. to 3,537 ft.; on pump test made 260 bbls. of oil and 625 bbls. of water per day.
SW SE Sec. 26-24-36.

Tide Water Oil Co.'s No. 1 Woolworth, C SW SE Sec. 26-24-36.
Drlg. 2,742 ft. in anhydrite; base of salt at 2,718 ft.

Jal Area

Byrd-Frost, Inc.'s No. 1-A Wells, SE SE NW Sec. 12-25-36.
T.D. 3,338 ft. in lime; flowed 56 bbls. in 24 hrs. through the 2½-in. at 3,325 ft. with packer; will acidize.

Byrd-Frost, Inc.'s No. 2-A Wells, SW SW SE Sec. 12-25-36.
Location.

Harry Leonard's No. 1-B Justis, SW NW NW Sec. 20-25-37.
Drlg. at 1,300 ft.; air pocket at 1,287 ft.

Gypsy Oil Co.'s No. 1-B Arnott, NW SW SW Sec. 22-25-37.
T.D. 3,400 ft.; D.S. test at 3,370-3,400 ft. showed 1,300 ft. sulphur water in 1 hr.; cmtd. back to 3,240 ft.; W.O.C.

Gypsy Oil Co.'s No. 1 Arnott, C NE NW Sec. 2-25-36.
T.D. 3,514 ft.; 2-in. at 3,507 ft.; produced 5½ bbls. pipe line oil per hr.; preparing to acidize.

Gypsy Oil Co.'s No. 2 Arnott, C NW NE Sec. 2-25-36.
T.D. 4,000 ft. in sand; cmtd. back to 3,555 ft.; made 60 bbls. oil and 60 bbls. of water; cmtd. back again with 10 sacks; W.O.C.

Gypsy Oil Co.'s No. 1-A Vinson Ramsey, C SE SE Sec. 12-26-36.
T.D. 2,094 ft. in salt and anhydrite; 13⅜-in. parted; ran 9⅝-in. to 2,088 ft. and cemented with 800 sacks.

R. H. Henderson et al's No. 1 Langlie, C SE SE Sec. 8-25-37.
Drlg. plug; 5 3/16-in. at 3,194 ft. with 400 sacks.

R. H. Henderson et al's No. 1 Off, C NW NE Sec. 11-25-36.
S.D. 5 ft.

Jeffers Oil Co.'s No. 1 Carlson, C NW SE Sec. 27-25-37.
Drlg. 460 ft. in red beds; preparing to pull 12½-in.

Tide Water Oil Co.'s No. 1 Coats, SE SE NW Sec. 31-25-37.
T.D. 3,332 ft. in lime; made 125 to 270 bbls. of fluid, 15 per cent water; went dead; pulled packer and acidized and ran packer to 3,285 ft.; swabbed 6 bbls. of fluid, 15 per cent water.

Hobbs Area

The drilling in of several big wells on the flanks of the Hobbs structure in recent weeks resulted in three new locations this week. Shell Petroleum Corp.'s No. 2 Turner, SW NW NE Section 34-18-38, north of Hobbs Townsite, is on the southeastern edge on a line with its No. 1 Turner on the south and its No. 2 Sanger on the northwest. Same company's No. 2 Rice, C SW SE Section 13-18-37, is on the northwestern side, an east offset to Continental Oil Co.'s No. 13-B-1 State, a near completion. The other is Samedan Oil Co.'s No. 2-B Moon, SW NE NE Section 28-18-38, one-third of a mile out from the nearest producer on the east side.

Continental Oil Co.'s No. 4 Grimes, SW NE SE Sec. 28-18-38.
Rigging.

Continental Oil Co.'s No. 13-B-1 State, C SE SW Sec. 13-18-37.
T.D. 4,038 ft.; treated 1,500 gals. and waiting; pay at 4,018-38 ft.; flowed 25 bbls. in 1 hr. with 1,900,000 ft. before treating; acidized with 4,000 gals.; preparing to test.

Samedan Oil Co.'s No. 2-B Moon, 1,315 ft. from N line and 1,120 ft. from E line, Sec. 28-18s-38e.
Cellar and pit.

Samedan Oil Co.'s No. 2 Moon, 1,315 ft. S of N line and 2,310 ft. W of E line, Sec. 28-18-38.
Drlg. 3,915 ft. in anhyd.

Samedan Oil Co.'s No. 1 Byers, 666 ft. from N line and 2,310 ft. from E line, Sec. 3-19-38.
T.D. 3,770 ft. in anhydrite; plugged back to 3,228 ft.; set whipstock and drilling at 3,226 ft.

Gypsy Oil Co.'s No. 4 Graham-State, C NW NE Sec. 24-18-37.
T.D. 6,230 ft.; tested 130 bbls. in 1 hr., 40 per cent water, through 3-in.; preparing to set packer below 4,200 ft.

National Securities Oil Co.'s No. 1 Linam, NE SE SW Sec. 33-18-37.
T.D. 4,506 ft.; P.B. to 4,238 ft.; S.D.O.

Shell Pet. Corp.'s No. 4 Nora Berry, 1,325 ft. W of E line and 1,315 ft. N of S line, Sec. 31-18-38.
Drlg. 2,523 ft. in anhydrite and salt.; 9⅝-in. at 1,526 ft. with 200 sacks.

Shell Pet. Corp.'s No. 2 Turner, 1,020 ft. from N line and 2,316 ft. from E line, Sec. 34-18s-38e.
Location.

Shell Pet. Corp.'s No. 2 Rice, C SW SE Sec. 13-18s-38e.
Location.

Lea Area

Two wildcats drilling in the Lea area, one southwest of the Lea Pool and the other northwest, are shut down for orders with water in the hole. Jeffers Oil Co.'s No. 1 Jiminez, C SW SE Section 12-20-33, northwest of the pool, is shut down at 3,355 feet in lime with 1,500 feet of sulphur water showing in one hour at 3,540-55 feet, and same company's No. 1 Etz, C NE SW Section 12-21-32, is shut down at 3,583 feet. It had an oil show with salt water at 3,567-75 feet followed by 2,700 feet of sulphur water at 3,575-83 feet.

Texas Co.'s No. 1 Cole, C NE NE Sec. 35-19-33.
T.D. 2,900 ft. in gray lime; recmtd. 7-in. with 90 sacks.

Anderson & Prichard's No. 1 Fisher, C SE NE Sec. 8-20-35.
S.D.O. at 4,375 ft.; 4,325 ft. of water.

Argo Royalty Co.'s No. 2 Burner, C SE SE Sec. 8-20-32.
T.D. 1,155 ft. in salt; 8¼-in. on bottom with 35 sacks; W.O.C.

Jeffers Oil Co.'s No. 1 Jiminez, C SW SE Sec. 12-20-33.
S.D.O. at 3,355 ft. in lime; 1,500 ft. of sulphur water.

Jeffers Oil Co.'s No. 1 Etz, C NE SW Sec. 12-21-32.
S.D.O. at 3,583 ft. in lime; 2,700 ft. of sulphur water.

CAPROCK AREA

Vierson & Brown's No. 1 Robinson, C NW SE Sec. 14-11s-32.
Standing; rig completed.

Maljamar Area

Maljamar Oil & Gas Co.'s No. 1 Miller, C NW SW Section 23-17-32, is still testing at 4,190 feet and swabbing 30 bbls. per day.

BERNALILLO COUNTY

Norins Realty Co., Inc.'s No. 1 Gallegan grant, C NW NW Sec. 19-11n-4e.
Drlg. at 500 ft.

CHAVES COUNTY

Comanche Drlg. Co.'s No. 2 Sloop-Purcell, C NE NE Sec. 15-11s-26.
Location.

Los Chaves Dev. Co.'s No. 1 Government, C NE Sec. 8-8s-23.
Drlg. below 500 ft.
Spanish Grants Oil Co.'s No. 1 fee, SE SE SW Sec. 2-8s-23.
Spud. & S.D.
John Tannehill's No. 1 Campbell, NE SE NE Sec. 1-11s-25.
Drlg. 645 ft. in gypsum.
Warman Oil Trust's No. 1 Weldon & Hoar, NW NW SE Sec. 9-14-25.
Drlg. 1,605 ft.

Eddy County

Barnsdall Oil Corp.'s No. 2 Dodd, C NE SE Section 22-17-29, in the Jackson Pool, was practically a completion at 2,930 feet when the rig caught fire and was destroyed. Loss is estimated at $5,000. Repairing is in progress. The hole was shot at 2,687-2,700 feet with 60 quarts; at 2,450-60 feet with 30 quarts and 2,360-70 feet with 30 quarts. It had not been gauged but was estimated at 100 bbls. a day.

Barnsdall Oil Corp.'s No. 2 Dodd, C NE SE Sec. 22-17-29.
T.D. 2,930 ft.; repairing rig after fire.
R. D. Compton et al's No. 6 Mann, NW SW NE Sec. 4-18-27.
Drlg. 894 ft. in red beds and gypsum.
Coronado Exploration Co.'s No. 1 Anderson, C NE NW Sec. 13-20s-23.
S.D. 1,462 ft.
Dooley & Shanks' No. 1 McClay, C NE SE Sec. 23-18-30.
Drlg. 2,395 ft.
Dooley et al's No. 1 Commerce Trust, NW NE SW Sec. 8-20-27.
T.D. 700 ft.; running 6¼-in.
Emperor Oil Co.'s No. 2 Puckett, C NW NE Sec. 24-17-31.
Location.
Flynn, Welch & Yates' No. 1 Yates, C SE NE Sec. 6-20-27.
T.D. 1,458 ft. in lime; fishing for tools; oil show 1,293-1,300 ft.; gas show 1,385 ft.; oil show 1,400-19 ft.
Getty Oil Co.'s No. 7 Dooley, SW SW NW Sec. 24-20-29.
Shut down for orders at 6,053 ft. in gray sand.
R. G. Patillo's No. 1 Thomason, SE SE NE Sec. 12-20-28.
S.D. at 500 ft. for repairs.
Pecos Valley Gas Co.'s No. 1 Hastie, SE NW NE Sec. 17-17-28.
Drlg. 730 ft. in anhyd. and shale; 8¼-in. at 400 ft.; show of oil at 601-10 ft.; increase at 622-26 ft.
Rampo Oil Co.'s No. 1 State, CNL NE SE Sec. 32-17-28.
S.D. 2,232 ft. in lime.
Repollo Oil Co. and C. J. Dexter's No. 3-X Parke, SE SE SE Sec. 15-17s-30e.
Location.
Tignor, Etz & Keyes' No. 2 Keyes, C NE SW Sec. 10-17-28.
Drlg. 240 ft. in red beds.

GUADALUPE COUNTY

Anton Chico Dev. Co., Ltd.'s No. 2 fee, NW NE SW Sec. 20-9n-17.
S.D. 900 ft.; changing over to cable tools.

McKINLEY COUNTY

Bennett & Lingfelter's No. 1 Lark Drlg. Co., NE NE NW Sec. 29-20-9w.
S.D. 560 ft. in sand; est. 20 bbls. daily at 469-72 ft. and 554-60 ft.
A. C. Kittel's No. 1, NW NW Sec. 32-20-9w.
Material on ground.
R. W. Sanderson et al's No. 1, NE SW Sec. 21-20-9w.
Material on ground.
David K. Stacey's No. 2 Webber, SW NW Sec. 29-20-9w.
Rig on ground.

OTERO COUNTY

Flynn, Welch & Yates' No. 1 Donahue, C NW NE Sec. 28-24-15.
T.D. 1,688 ft. in lime; fishing for tools.

QUAY COUNTY

Quay County Dev. Co.'s No. 1, C SE SW Sec. 19-9n-33e.
Drlg. 450 ft.
H. F. Wilcox Oil & Gas Co.'s No. 1 Gurley, SE SW SE Sec. 32-7n-32.
S.D. 500 ft.

RIO ARRIBA COUNTY

El Vado Structures Property Co., Ltd.'s No. 1-A Tierra Amarilla grant, NE Sec. 26-3s-1e (unsurveyed).
Rigging.

ROOSEVELT COUNTY

Claudell Dev. Co.'s No. 1 Wilmes, C SW SE Sec. 21-2s-30.
T.D. 3,667 ft.; resuming; will pull 5-in. and test shows in upper horizons.
K. M. Hancock et al's No. 1, 33 ft. from W line and 1,000 ft. from N line, Sec. 21-1n-37.
Drlg. below 200 ft.

SANDOVAL COUNTY

Continental Oil Co.'s No. 1 L-Bar Cattle Co., 630 ft. N of E quarter cor. Sec. 2-13n-4w.
W.O.C. at 365 ft.

SAN JUAN COUNTY

Aztec Coop. Oil Co.'s No. 1 Aztec, SE SW Sec. 10-30n-11w.
Material on ground.
Continental Oil Co.'s No. 45, NE NW NW Sec. 12-19n-29w.
Drlg. 860 ft. in water sand.
J. F. Cross et al's No. 1 Wilson, SW SW SE Sec. 17-30-11w.
S.D. 810 ft.
J. F. Cross' No. 6 Duggan, NE NE NE Sec. 20-30-11w.
S.D. 647 ft.
Cross & Poole's No. 1 Aztec, Sec. 1-30-11w.
Making water shutoff at 740 ft.
A. E. Haney's No. 1 Hare, SE SE Sec. 14-29-11w.
Drlg. 680 ft.
Kutz Canon O. & G. Co.'s No. 1 Day, SW SW SW Sec. 20-28-10.
Drlg. 4,370 ft. in sandy shale and shells and showing some increase in oil and gas; preparing to unload 4,000 ft. of water and test.
R. C. Oswell's No. 4 Government, SW NW NE Sec. 34-30-11w.
S.D. 1,790 ft.
R. C. Oswell's No. 6 Government, SE NE Sec. 33-30-11w.
Spudded and S.D.
Reserve Oil Co.'s No. 6 Shaffer, SE NE SE Sec. 36-22n-14w.
Location.
San Juan Pet. Co.'s No. 1 Lemley, NE SE SE Sec. 32-30-11w.
S.D. 1,314 ft.
Nick Spatter's No. 1 fee, C NE SW Sec. 32-31-11w.
S.D. 1,480 ft. for pipe.
H. C. Stratton's No. 1 Hart, SW NE SE Sec. 25-30-12w.
Abd. at 1,680 ft.

SAN MIGUEL COUNTY

Cabra Springs O. & G. Co.'s No. 1 Thompson, SW NE NE Sec. 22-12n-22e.
Drlg. 4,000 ft.
Cabra Springs O. & G. Co.'s No. 2 West Pino Mesa, SW SW SW Sec. 31-12-22.
Drlg. 550 ft.
Pioneer Oil Co.'s No. 2 Montezuma, CSL SE SW Sec. 14-15n-16.
Drlg. 300 ft.
Starr-Kennedy Oil Co.'s No. 3 Adams, NE NE SE Sec. 25-17-16.
Stdg. at 5,090 ft. after completing rig to resume following fire.
Holmberg Interests' No. 1 Cantwell, NW NW NW Sec. 5-10n-9e.
S.D. 810 ft. (cor.)
Kelsey Clients Dev. Est's No. 2 State, C NW Sec. 22-10n-10e.
S.D. 1,450 ft.

TORRANCE COUNTY

48 Pet. Co.'s No. 1 Greenfield, C NW SW Sec. 17-9n-8e.
Drlg. 450 ft. in chocolate colored shale. 10-inch at 340 ft.

UNION COUNTY

Sierra Grande Oil Corp.'s No. 1 Rogers, C NE SW Sec. 4-29-29.
S.D. 2,280 ft. in sand with show of gas est. at 1,000,000 ft.

VALENCIA COUNTY

Pres-Sel Dev. Co.'s No. 1 Morris, NE SE Sec. 30-12n-10w.
Drlg. 600 ft.
Ringle Dev. Co.'s No. 2 Tome grant, C NE SE Sec. 20-6n-3e.
Rigged up and S.D.
Ringle Dev. Co.'s No. 1 Tome grant, C SE SE Sec. 36-6n-3e.
S.D. 400 ft.
Western Natural Resources Corp., Inc.'s No. 2 San Clemente, SE SE NW Sec. 5-6n-1e.
S.D. 6,001 ft.

COLORADO

The first location for a deep test in eastern Colorado this year was reported this week to have been made by Ramsey Petroleum Corp. near the center of Section 13-8s-57, in Elbert County, 10 miles northwest of Limon, in Lincoln County. It is about 9 miles east of a test drilled on Union Pacific land in the C NW SE Section 7-8s-58, two years ago by J. M. Botts and associates to 3,150 feet, after which Mr. Botts died and rig was moved away. The Ramsey interests began blocking up acreage in that district several years ago following the mapping of a structure north of Limon by Clyde Wagner. The block is now leased solid and comprises 30,000 acres, a lease on Union Pacific Railroad land having been concluded in the past few weeks and leases renewed on all the state land in the block. C. E. Lambert obtains a half-interest in the block and will turn a one-fourth interest to Helmerich & Payne, Inc., of Oklahoma City, contractors, for a well to 6,000 feet, or production, and $12,000. Drilling is to start by August 1. An interesting side line is that this location is in the general area of a mysterious water well drilled by the old Kansas Pacific Railroad in about 1865 when the line was being constructed. Instead of water it encountered oil at around 600 feet. The railroad station of Deer Trail was moved to its present location to get a water supply for locomotives. The log of the old well came to light a few years ago and a number of shallow tests were drilled in the vicinity. In more recent years John Connor made a diligent search for evidence of the location of the old well and went to Washington where he pored over records and maps in the land department. He was said to have returned and found parts of the old machinery and to have leased all the land in the vicinity. These leases were not put on record and about a year ago he died without disclosing the location of the old well. J. M. Botts believed he had found the spot when he drilled 9 miles to the west of the Ramsey location.

ADAMS COUNTY

Riddle Pet. Co.'s No. 1 Baxter, C SW Sec. 2-3s-66w.
Standing partially rigged and drlg. wtr. well.

ARCHULETA COUNTY

William E. Hughes Est.'s No. 1 fee, SW Sec. 24-33n-2e (unsurveyed).
Rigging.
Oil City Pet. Co.'s No. 1-A Garnett, NW NE SW Sec. 25-33n-2e.
S.D. at 1,142 ft. for parts. Show of oil, est. at 3 to 4 bbls., at 1,140 ft.

TRU-LAY
Preformed ROTARY LINES

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UNDER LIGHT LOAD!

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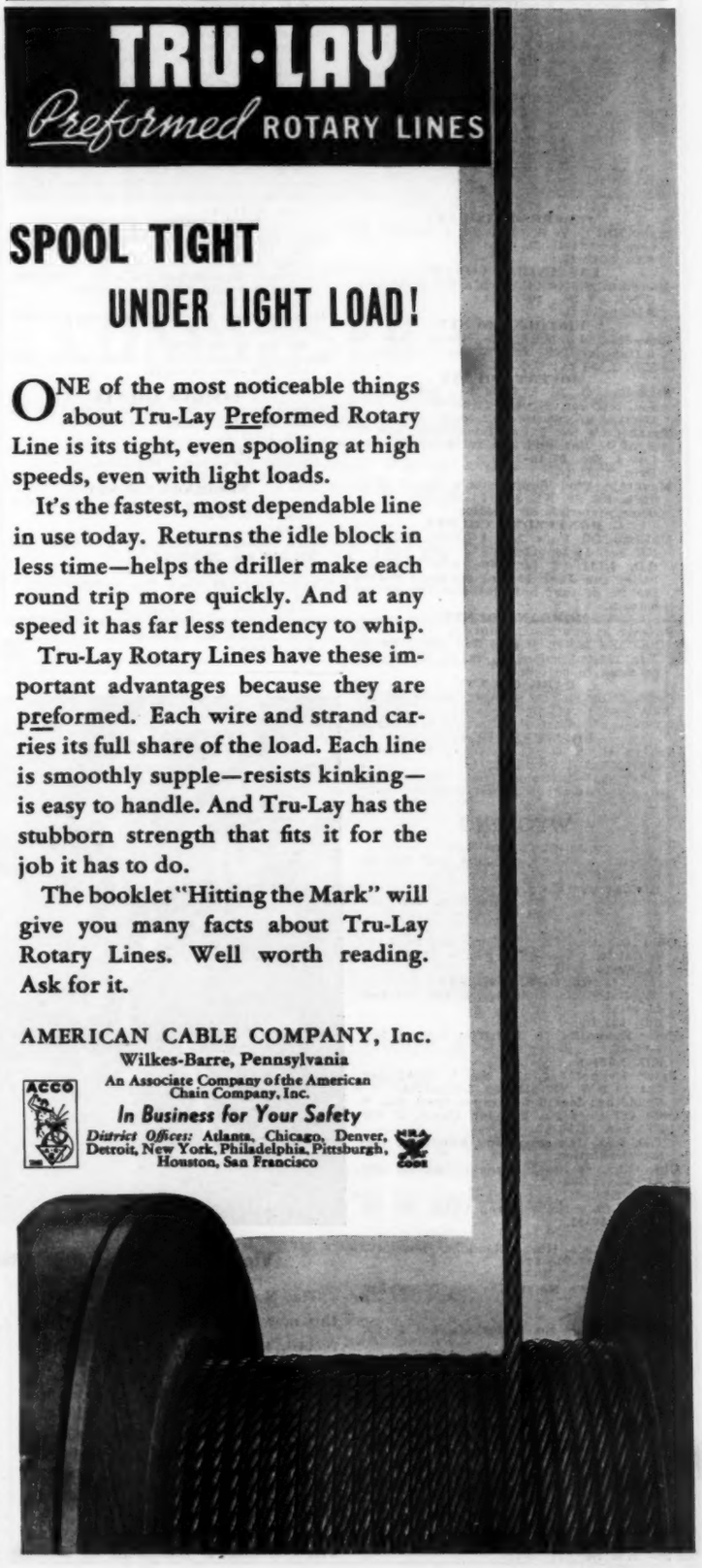


Navajo Oil Co.'s No. 1 Crowley, SW SW NE Sec. 11-32n-1e.
Resumed at 537 ft.; 5⅝-in. set at 537 ft.

BACA COUNTY

J. H. Everett et al's No. 1, 330 ft. NW cor. Sec. 24-32-48.
Drlg. water well.

BOULDER COUNTY

Leslie R. Steele et al's No. 1 Maxwell, SW NE NW Sec. 24-1n-71.
Drlg. below 1,100 ft. with good show of light oil.

FREMONT COUNTY

Waterville Oil Co.'s No. 1 State, SE SE NW Sec. 16-18s-69w.
T.D. 2,780 ft.; 150 ft. of oil in the hole. Underreaming 5-3/16-in. at 2,601 ft.

GRAND COUNTY

Colorado Oil Ref. Co.'s No. 1 Linke, NE SW NW Sec. 13-1n-77w.
S.D. 1,900 ft. for repairs.
Interstate O. & G. Co.'s No. 1 Hinman, NE SE NW Sec. 11-2n-81.
Resuming at 1,997 ft.; will C.O.; cement off caves and drill deeper.

HUERFANO COUNTY

S. W. Pressey's No. 1 Ojo, SW NE Sec. 10-26-69.
S.D. 2,550 ft.

JACKSON COUNTY

Colorado Oil Ref. Co.'s No. 1 North Park Coal, NW NW Sec. 18-9n-78.
T.D. 1,805 ft.; reaming from top to run 15¼-in. to 500 ft.; enlarging hole to make deep test.
Continental Oil Co.'s No. 3 Hoye, NW NW NE Sec. 24-9n-78.
Drlg. 3,112 ft. in shale and shells.

JEFFERSON COUNTY

Ruby Hill O. & G. Co.'s No. 1 Braden, SE cor. Sec. 24-4s-69.
S.D. 4,280 ft.

LAS ANIMAS COUNTY

Mountain States Oil Corp.'s No. 1 Nickols, C NE SE Sec. 10-34-62.
S.D. 1,640 ft.

LINCOLN COUNTY

Consolidated Smelting & Metals Co.'s No. 1 Hancock, NE NE SW Sec. 7-17s-52.
T.D. 1,190 ft.; C.O.

MOFFAT COUNTY

Stanolind O. & G. Co.'s No. 5-S Parkinson, NW cor. SE Sec. 22-4n-92.
Derrick up; waiting on tools.
Texas Co.'s No. 2 Ilse Investment, 620 ft. S of N line and 220 ft. E of W line, Lot 4, Sec. 23-4n-92.
Drlg. 1,181 ft.
Mountain Fuel Supply Co.'s No. 1 Murdock, SE SE NE Sec. 24-12n-101.
Some materials on location.

MONTEZUMA COUNTY

McElmo Oil Co.'s No. 1 West, NE NW NE Sec. 31-36n-17w.
S.D. 2,131 ft. for pipe and tankage; bailer run June 19 and oil stood within 200 ft. of top; hole bridged 700 ft. off bottom.

MORGAN COUNTY

Swisher et al's No. 1 Lunt, 92 ft. W of E line and 360 ft. N of S line, Sec. 3-4n-60.
T.D. 700 ft.; pulled 6¼-in. at 592 ft. and reaming to bottom.

PARK COUNTY

South Park Oil Co.'s No. 1 State, SE SE SW Sec. 16-11s-75.
Drlg. at 1,504 ft. show of gas at 1,442 ft.

PROWERS COUNTY

Trojan O. & G. Co.'s No. 1 Lotus Oil, NW NE NE Sec. 15-22-46.
T.D. 5,227 ft.; cmtd. back to 4,800 ft. to stop caving; drlg. out near bottom.

WYOMING

ALBANY COUNTY

California Co.'s No. 2 Hoist, SW NE SE Sec. 12-17n-77.
Rigging up rotary.
California Co.'s No. 1 Wilson, NW SW SW Sec. 18-17n-76.
Rigging up rotary.
Ohio Oil Co.'s No. 1 Two Rivers Land & Cattle, SW SW NE Sec. 8-17-74.
Ready to spud.

BIG HORN COUNTY

J. W. Bales' No. 1 Parker, C SW SW Sec. 23-49-89.
S.D. 125 ft.
Peter Evanoff's No. 1 Griffin, Lot 60, Sec. 4-55-97.
S.D. 1,594 ft.
Peter Evanoff et al's No. 1 McAllister, Lot 49 NW NE SE Sec. 3-55n-97w.
Spudding; location changed from Sec. 2.
Ohio Oil Co.'s No. 2 Sidan Canal, C SW SW Sec. 24-56-97.
T.D. 4,695 ft.; cementing hole after losing circulation.
Ohio Oil Co.'s No. 3 Byron Union, SE NW NE Sec. 22-56-97.
Drlg. 2,940 ft.
Ohio Oil Co.'s No. 4 Byron Union, SW NE Sec. 22-56-97.
Rig up.
Ohio Oil Co.'s No. 2 Sessions, NW NW NW Sec. 33-56n-97w.
Derrick up.
J. H. Shaffer's No. 1 Keachie, C SW SW Sec. 7-49-91.
Spudding.
Taylor Oil Co.'s No. 1 Hoskins, Lot 5 (SE SE), Sec. 35-54-97.
T.D. 5,375 ft.; lost 240 ft. of drill pipe while drlg. by old drill pipe at 4,950 ft.; S.D. account of high water.
Wyoming Oil & Ref. Co.'s No. 1 Evans, NE NE NW Sec. 12-49-91.
Set 12½-in. at 85 ft. (cor.) and S.D.

CARBON COUNTY

Ohio Oil Co. and California Co.'s No. 2 State, C NW NW Sec. 36-21n-79w.
R.U. rotary.
Ohio Oil Co. and California Co.'s No. 1 Union Pacific, Acct. 1, NE SW NW Sec. 25-21n-79w.
Rigging up rotary.
Ohio Oil Co.'s No. 4 Diamond Cattle, SE SW NW Sec. 25-20-79.
T.D. 2,822 ft.; preparing to drill deeper.
Earl W. Reeder, Inc.'s No. 1 Whitford, SW SE SE Sec. 24-20-84.
S.D. 4,383 ft.; (cor.).
Earl W. Reeder, Inc.'s No. 1 Union Pacific, C SW SW Sec. 19-20-83.
S.D. 5,931 ft.; may be deepened.

CONVERSE COUNTY

Chadron-Osage Oil Co.'s No. 1 State, SW cor. Sec. 16-32-69.
Drlg. 600 ft.
Continental Oil Co.'s No. 60 State, NW SW NE Sec. 9-33-76.
Derrick.
Continental Oil Co.'s No. 9 Whiteside, 3,-680 ft. S of N line and 1,072 ft. W of E line, Sec. 7-33-76.
Drlg. at 3,070 ft. in sandy shale.
Otto Olson et al's No. 1 Carey, Sec. 6-32-74.
S.D. 642 ft.
John Ackard's No. 1 Daniels, SW SW SE Sec. 17-32-71.
T.D. 3,600 ft.; fishing.

CROOK COUNTY

Dr. R. B. Kinter's No. 1 Rockford-Wyoming, CNL NE SE Sec. 13-52n-62w.
Drlg. at 1,170 ft. in Pahasaka (Madison) lime.

FREMONT COUNTY

Mid-American Oil Co.'s No. 3 Government, NW NE SW Sec. 24-28-92.
T.D. 150 ft.; straightening crooked hole.
Monongahela Oil Co.'s No. 1 Wisda, NE SE SE Sec. 13-28-92.
Drlg. 3,560 ft.
Tropic Oil Co.'s No. 1 Government, C SE SW Sec. 34-27-90.
Drlg. 2,701 ft.

HOT SPRINGS COUNTY

Argo Oil Co.'s No. 16 Ellen, NE SE NW Sec. 14-44-98.
Drlg. 2,395 ft.
California Exploration Co.'s No. 2 Government, NW SW NW Sec. 7-44-96.
Drlg. 1,827 ft. in shale.
Fern Oil Co.'s No. 1 Government, CSL SW SW Sec. 11-44-98.
Moving in materials.
Oscar G. Grace's No. 1 Government, SW NW NW Sec. 21-43-92.
Spudding.

LINCOLN COUNTY

Senrab Oil Co.'s No. 3 Government, N SE NW Sec. 10-26-113.
S.D. 1,011 ft.
Superior-Wyoming Oil Co.'s No. 2-B, Lot 3 (NE NW), Sec. 3-26n-113w.
Spudding at 130 ft.

NIOBRARA COUNTY

Argo Oil Co.'s No. 4 Elliott, C NE NW Sec. 5-35n-65w.
Spudding.
Black Hills Ref. Co.'s No. 1 Wright, SE SE SW Sec. 22-36-64.
Some material on location.
Continental Oil Co.'s No. 2 Schuricht, C SE NE Sec. 6-35-65.
Drlg. 2,897 ft. in shale and shells.
Interstate O. & R. Co.'s No. 1 Morrell, NW NE SE Sec. 9-39-61.
S.D. 3,030 ft.
Fall River Royalty & Producers Co.'s No. 3-L, CEL NE NE Sec. 2-39-61.
Drlg. 382 ft.
Ohio Oil Co.'s No. 2 Lamb, NE NW NE Sec. 5-35-65.
Drlg. 3,464 ft.
Ohio Oil Co.'s No. 4 Putnam, C SW SW Sec. 33-36-65.
Derrick up.
S. & H. Dev. Co.'s No. 1-A Olinger, SE NE NW Sec. 1-36-63.
T.D. 1,460 ft.; U.R. 5-in at 1,416 ft

Park County

The Texas Co.'s No. 3 Sonners, CWL NE NW Section 29-51-100, in proven territory in the northern part of the south field at Oregon Basin, was completed at 3,501 feet and pumped 100 bbls. the first 24 hours from the Embar. It improved and at last reports was averaging 250 bbls. daily. This is the first well the company has drilled in that field for several years. Texas Co. operates a refinery at Cody on Oregon Basin crude.

Geo. T. Beck's No. 1 fee, NW SE NW Sec. 27-53-101.
Resuming at 1,181 ft.
Continental Oil Co.'s No. 3 Northern Pacific, NW SE SE Sec. 23-58-98.
Drlg. 2,420 ft. in red beds.
Garland Oil Co.'s No. 2 Government, SE NE NW Sec. 14-56-98.
S.D. 2,166 ft.
V. M. Kirk's No. 1 Connaghan, C NW SW Sec. 10-50-100.
Moving in materials.
Resolute Oil Co.'s No. 1 State, C NW SW Sec. 16-57-101.
S.D. 3,608 ft.

SHERIDAN COUNTY

Beaver Creek Oil Synd.'s No. 1 Allison, SW SE Sec. 15-55-85.
S.D. 2,660 ft.
Texas Co.'s No. 7-J, SW SW SE Sec. 34-27-113.
Location.

SUBLET COUNTY

Piney-LaBarge Oil Co.'s No. 2 Government, CEL NE NW Sec. 18-28-113.
Drlg. below 520 ft.
Texas Co.'s No. 7-J, SW SW SE Sec. 34-27-113.
Drlg. 690 ft.

SWEETWATER COUNTY

Vermillion Oil Co.'s No. 1 State, SW cor. Sec. 16-12n-99.
S.D. 4,685 ft.
Wyoming-California Pet. Co.'s No. 1 Government, SE cor. Sec. 20-16-104.
Drlg. 1,020 ft., cable tools.

WASHAKIE COUNTY

C. L. Brome et al's No. 3 Government, SW NW NW Sec. 31-43-90.
Drlg. 1,300 ft.
Chris Oil Synd.'s No. 1 Government, C SW SW Sec. 31-43-90.
T.D. 1,830 ft.; fishing for tools.
Nystrom & Smoot's No. 2 State, SW NE NE Sec. 36-48n-90w.
Digging cellar; (first report).
Wyoming O. & R. Co.'s No. 1 Frison, NW SW NW Sec. 14-43-91.
T.D. 1,700 ft.; U.R. 8¼-in. from 1,420 ft. to bottom.

Weston County

An interesting small completion reported in the Osage Field this week is C. R. Herbison & Son's No. 3 Draper, SW cor. Section 15-46-63 (cor. location) in the shallow district on the east side. This is an old property off production for several years. The operators have put two old wells back on production and are beginning a development campaign. No. 3 Draper had a sand at 142-44 feet and a second sand at 180-190 feet. It was completed at 200 feet for 5 bbls. a day on the pump. The second sand is a discovery and will warrant deepening of old wells on the east side.

Conway Oil Corp.'s No. 1 Government, C SE NW Sec. 7-41-60.
T.D. 1,945 ft. in Minnelusa; fishing wtr. in the Embar.
Karl Kundy's No. 9 Government, NW cor. NE Sec. 31-46-63.
Waiting on casing.
Des Moines-Osage Synd.'s No. 1 Thierry, NW NW SW Sec. 32-46-63.
Drlg. 1,415 ft. in sandy shale and bentonite; show of oil and gas at 1,370 ft. in thin streak of sand.
Beaver Creek Oil Synd.'s No. 1 State, C NE NE Sec. 23-44-63.
Drlg. 150 ft.
Federal Oil Co.'s No. 6, C SE SE Sec. 15-46-64.
Cmtd. 8¼-in. at 1,253 ft.
La Lleishe Oil Co.'s No. 18 fee, C SW SW Sec. 17-46-63.
S.D. below 300 ft.
Updike Bros.' No. 5, CEL NE SW Sec. 25-46-64.
Fshg. below 600 ft.

MONTANA

BIG HORN COUNTY

Daniels Pet. Co.'s No. 1 May, C SE SE Sec. 13-1s-33e.
Spudding.
Enterprise Oil Co. et al's No. 2 Lynde, SW SW SE Sec. 21-6s-35e.
T.D. 3,590 ft.; C.O. 50 ft. off bottom.

CARBON COUNTY

Bailey Round Butte Oil Co.'s No. 1, 1,120 ft. W of E line and 2,140 ft. N of S line, Sec. 3-6s-23.
Drlg. 986 ft.
Ohio Oil Co.'s No. 15 Montana Industrial, C NE NE Sec. 11-7s-21.
Coring at 4,212 ft.; show of gas.

CASCADE COUNTY

C. Leonard Smith's No. 1, NE NE SW Sec. 14-22n-2e.
Fort Worth spudder on location.

CHOTEAU COUNTY

Mills & Decker's No. 1, NE NW Sec. 29-27n-13e.
Spudding.

FERGUS COUNTY

Button Butte O. & G. Co.'s No. 1 Woodward, SE SE SW Sec. 20-14n-24.
Drlg. 3,095 ft.
Emmons et al's No. 1, 220 ft. W of E line and 2,140 ft. N of S line, Sec. 6-20-18.
Drlg. 650 ft.
S. W. Pennock et al's No. 1 Nordheim, NW NE NE Sec. 6-21n-18e.
S.D. 480 ft.; (cor.)

CALLATIN COUNTY

Montana Gas & Pet. Corp.'s No. 1 Adams, SE SE SE Sec. 36-2n-1e.
Drlg. 1,421 ft.
Ben W. Ryan's No. 1 Tice, NE NE NE Sec. 28-1n-2e.
Drlg. 2,015 ft.

Glacier County

A semiwildcat in Texas Co.'s No. 1 Aaronson and others, C N half SE Section 21-35-6w, nearly a mile west and half a mile southwest of the nearest producers in the Cut Bank Field was completed for 8 bbls. in 13 hours on the pump. It was completed at 3,042 feet in sand at 3,025-35 feet. It showed some water with the oil and was shot with 20 quarts.

Two new locations were reported. Custer Oil Co.'s No. 1 Tweedy, W NW NE Section 36-33-6w, was formerly carried as Gardner-Smith's No. 2 Tweedy.

Anderson's No. 2 Anderson, NW SE NW Sec. 26-35-6w.
Drlg. 725 ft.; 10-in. at 475 ft.
Askins' No. 1 Askins, Lot 24, Blk. 33, Sec. 12-33-6w.
S.D. 2,700 ft.; will start sidetracking at 2,021 ft.

View of the Normandie's turbo-generator compartment

The Normandie of the French line, the new holder of the transatlantic record, will be one of the oil industry's largest single customers. Based on its first round-trip, the giant liner consumes from 6,600 to 8,500 bbls. of fuel oil daily, depending largely on its speed. The maximum consumption is obtained at 31 knots and around 7,000 bbls. daily at more normal speeds of 28 to 29 knots.

Based on these figures the liner will consume a minimum of 60,000 bbls. of fuel on a round-trip from Europe to the United States. The boat secures its steam power from 29 water tube boilers with a working pressure of 398 pounds each capable of delivering 7,000 horsepower.

The liner is a large consumer of several grades of lubricants. Among the most important lubricating oil requirements are those of four turbo-generators each capable of generating 40,000 horsepower. Lubricants for the ship are furnished by the Socony-Vacuum Oil Co., Inc.

C. P. Castle's No. 2 State, 600 ft. N of S line and 1,320 ft. E of W line, Sec. 36-35-6w.
Topped Colo. at 403 ft.; set 10-in. at 430 ft.
A. B. Cobb's No. 1 Young, C SE NE Sec. 5-32-5w.
Drlg. 1,120 ft.
Consolidated Gas Co.'s No. 5 Tribal, Lot 5, Sec. 3-34-6w.
Drlg. at 2,959 ft.; 1,000 ft. of oil in hole.
Consolidated Gas Co.'s No. 8 Tribal, Lot 8, Sec. 10-34-6w.
Topped Colo. at 575 ft.; set 10-in. at 578 ft.
Consolidated Gas Co.'s No. 1 Arnold-State, C SW NE Sec. 26-35-6w.
Drlg. 1,470 ft.
Custer Oil Co.'s No. 1 Tweedy, 440 ft. from W line and 330 ft. from N line, NE Sec. 26-33n-6w.
Moving in rig.
Dakota-Montana Oil Co.'s No. 3 Winkler, 440 ft. S of N line and 590 ft. E of W line, Sec. 26-35-6w.
T.D. 2,635 ft.; fshg. for bit.
Goodstein & Smith's No. 1 Olson, C NE SE Sec. 26-34-6w.
Bldg. rig.
Grant Oil Co.'s No. 1 Bakke, C NW NE Sec. 32-34-5w (formerly R. C. Jeffries).
Topped Colo. at 352 ft.; set 10-in. at 375 ft.; drlg. at 450 ft.
Kately's No. 1 Thornson, SW NW SW Sec. 25-36-6w.
T.D. 2,791 ft.; 1,800 ft. of oil in hole with 2,000,000 ft. of gas.
Lawler & Hoer's No. 1 Downen, C SE SW Sec. 9-33-5w.
T.D. 340 ft.; fshg.
Montana Power Gas Co.'s No. 1 G. Carrigeaux, C SE NW Sec. 28-33-5w.
Drlg. 1,935 ft.
Montana Power Gas Co.'s No. 2 Holland Unit, NE NW SE Sec. 27-36-5w.
Drlg. 2,260 ft.
Montana Power Gas Co.'s No. 2 Bonnett, S SW NW Sec. 4-32-5w.
Rig.
Olive Oil Co.'s No. 3 Winkler, 725 ft. S of N quarter cor., Sec. 35-35-6w.
Rig on location.
Par Oil Co.'s No. 5 Haines, C SW SE Sec. 2-34-6w.
Drlg. 2,210 ft.
Santa Rita O. & G. Co.'s No. 1 Government, C NE SW Sec. 4-32-5w.
Drlg. 2,988 ft.
Santa Rita O. & G. Co.'s No. 1 McCabe, C NW NW Sec. 28-33-5w.
Drlg. 2,720 ft.
Santa Rita O. & G. Co.'s No. 2 McCabe, NW SE NE Sec. 31-33-5w.
Location.
Santa Rita O. & G. Co.'s No. 1 Stahl, C NW SE Sec. 20-33-5w.
Spudding at 60 ft.
Santa Rita O. & G. Co.'s No. 1 Savage, C NW SW Sec. 9-33-5w.
Spudding at 340 ft.
Santa Rita O. & G. Co.'s No. 5 Tribal, C SW NW Sec. 15-35-6w.
Drlg. at 1,050 ft.
Santa Rita O. & G. Co.'s No. 1 Whitehead, C SW SE Sec. 23-35-6w.
Drlg. at 2,750 ft.
R. C. Tarrant's No. 2 Getty, NW NW SE Sec. 2-34-6w.
S.D. 2,700 ft.
R. C. Tarrant's No. 4 Britton, C SW SW Sec. 12-34-6w.
Rig on location.
R. C. Tarrant's No. 6 Haglund, Jr., C SE NW Sec. 13-34-6w.
Rig on location.
R. C. Tarrant's No. 2 Larson, C W½ W½ NE Sec. 12-34-6w.
Location.
R. C. Tarrant's No. 1 O'Brien, C SE SW Sec. 29-34-5w.
Drlg. 2,225 ft.
R. C. Tarrant's No. 2 McClellan, C NW SE Sec. 12-34-6w.
Rigging.
R. C. Tarrant's No. 1 Ruetten-Wold, C NW NE Sec. 13-34-6w.
Drlg. 2,640 ft.
Texas Co.'s No. 1 Marie Hagerty, C SE NE Sec. 9-34-6w.
T.D. 3,004 ft.; rigging pumping unit.
Texas Co.'s No. 1 Morgan, C NE NW Sec. 33-33-5w.
Drlg. 260 ft.
Texas Co.'s No. 3 Yunck, C SE SW Sec. 14-35-6w.
Drlg. 50 ft.

LIBERTY COUNTY

John Wilde's No. 2-A Mahoney, W SE SW Sec. 23-37-4e.
Drlg. at 1,543 ft.; S.O. in the Bow Island sand.

PETROLEUM COUNTY

Hardendorf & Keyes' No. 1 Austed, SW NW SE Sec. 22-13n-28e.
Rigging.

PHILLIPS COUNTY

Little Rocky Dev. Co.'s No. 1, SE SE SE Sec. 17-24-24.
S.D. to finance at 352 ft.

PONDERA COUNTY

Norden Corp., Ltd.'s No. 1 Holiam, NW NW NW Sec. 12-28n-6w.
Rigging up.
Texas Co.'s No. 1 Unit 5, C SW SW Sec. 3-30-5w.
Drlg. at 405 ft.

ROSEBUD COUNTY

Birney O. & G. Co.'s No. 1, SW SW SW Sec. 7-6s-43e.
Drlg. below 325 ft.

STILLWATER COUNTY

Continental Oil Co.'s No. 1 Orr, SW NW SE Sec. 18-6s-17e.
T.D. 2,945 ft.; C.O. to deepen.

TOOLE COUNTY

A. Beardsley's No. 4 Swears, SE SE NW Sec. 9-35-2w.
T.D. 885 ft.; rebldg. rig after fire.
Bi-State Oil Co.'s No. 4 Haenel, SW SW Sec. 3-34-1w.
T.D. 850 ft.
E. B. Coolidge's No. 2 Gout, NW NE SE Sec. 35-36-2w.
Drlg. 200 ft.
E. B. Coolidge's No. 1 Shaw, SW SE NE Sec. 35-36-2w.
Pumped 35 bbls. first 24 hrs.; completed.
A. C. Crumley's No. 6 Shaw, SW NW SE Sec. 35-36-2w.
Rigged and ready to spud.
Crumley & Son's No. 5 Seabrook, NE SE SE Sec. 24-35-3w.
Drlg. 300 ft.
P. L. Eddy's No. 5 Seabrook, NE SW SW Sec. 19-35-2w.
Location.
Fraser & Kluth's No. 1 Severance, C SE NE Sec. 29-32-2e.
T.D. 1,520 ft.; running 6⅝-in.
Graham Oil Co.'s No. 2 McDonald, E SE SW Sec. 19-35-2w.
Rigging up.
Imperial Oil Co.'s No. 5 Craig, C NE NE Sec. 19-35-1w.
Sand at 1,594-1,600 ft.; 5-3/16-in. at 1,570 ft.; 35 ft. of oil in hole; will acidize.
T. P. Kyle's No. 1 Clark, SW SW SE Sec. 19-37n-1e.
Resuming at 1,010 ft.
McKnight & Stock's No. 2 State, SW NW NW Sec. 16-35-2w.
Drlg. 210 ft.
Monopeg Oils, Ltd.'s No. 3 Dipple, S SW NW Sec. 28-35-1w.
S.D. 1,355 ft.
Mon-Tex Pet. Co.'s No. 1 fee, SE NW Sec. 27-34-1w.
Rigging.
Nepstead-Vanderpas' No. 19 Government, SE NW Sec. 32-35-2w.
T.D. 1,495 ft.; will acidize; show of oil and wtr. at 1,467-74 ft.
C. T. Olen's No. 1 Engermoen, SW SW NW Sec. 14-35-2w.
Drlg. 1,195 ft.
E. O. Reickhoff's No. 2 Government, SW SW NE Sec. 3-35-3w.
Drlg. 125 ft.; (cor.).
Pfabe & Engleking's No. 8 Seabrook, SE SW SE Sec. 19-35-2w.
Small well at 1,519-29 ft.; will acidize.
C. Leonard Smith's No. 1 Eckhoff, C SE Sec. 6-33n-2e.
S.D. 575 ft. for new boiler.
C. Leonard Smith's No. 1 Federal Land Bank, C NE SE Sec. 11-33n-1e.
Spudding at 175 ft.
C. Leonard Smith's No. 1 I. Halverson, C NE SE Sec. 18-33n-2e.
Spudding at 125 ft.
C. Leonard Smith's No. 1 H. Halverson, NW NE Sec. 18-33n-2e.
Rigging up light rotary at 250 ft.
Texas Co.'s No. 1 Kenny, C NE NE Sec. 15-35-2w.
Drlg. 1,460 ft.

UTAH

DAGGETT COUNTY

Mountain Fuel Supply Co.'s No. 2 Murphy, NE NE Sec. 21-3n-24w.
Drlg. 6,372 ft. in shale.

UTAH COUNTY

Diamond Oil Co.'s No. 4 Government, CSL SE NW Sec. 16-8s-5e.
Drlg. at 3,735 ft.; showing considerable gas.

WASHINGTON COUNTY

Arrowhead Pet. Co.'s No. 2 Escalante, NW NW NE Sec. 19-43-15.
T.D. 4,114 ft.; P.B. to 3,250 ft.; shot and C.O.
Arrowhead Pet. Co.'s No. 1-A, SE SW NE Sec. 1-43-15.
Drlg. 1,400 ft.

Hudson Bay Junction

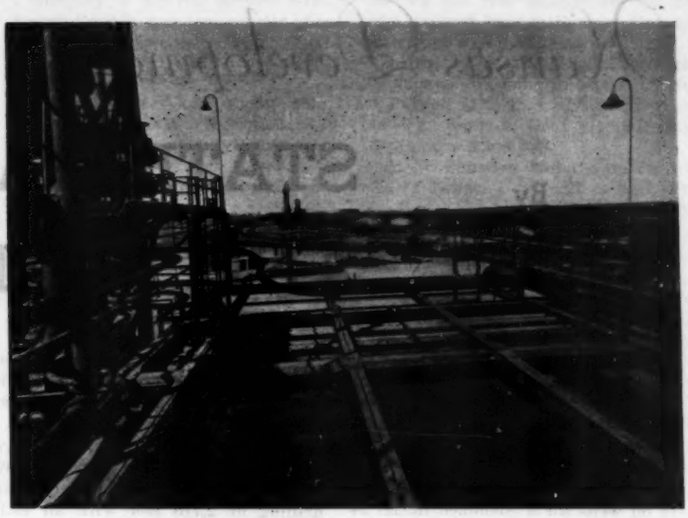
In Hudson Bay Junction, Northern Saskatchewan, Trail Blazer Oil & Gas Co.'s No. 1, SW Section 32-44-3w2 is standing at 1,085 feet pending analysis of samples. It may be deepened, or a new test drilled.

Rowe and Associates' No. 1, Vital Duphette farm, west half Lot 2, Concession 4, is rigged ready to spud. Stover & Rawlings' No. 1, Front Concession and Stirling Side Road, is below 1,650 feet. Across the River Thames, E. P. Rowe's No. 1, Bruette farm, Raleigh Township, is rigging.

Crude Petroleum Stocks

Grade—	June 22 (bbls.)
Pennsylvania Grade	4,804,000
Other Appalachian	897,000
Lima-NE Ind.-Mich.	1,218,000
Illinois-SW Ind.	11,570,000
N. La. and Ark.	10,388,000
W. Tex. and SE N. Mex.	31,174,000
East Texas	29,769,000
Other Mid-Continent	146,457,000
Gulf Coast	23,614,000
Rocky Mountain	27,363,000
California	30,511,000
Domestic crude	317,765,000
Foreign crude	4,015,000
Total*	321,780,000

*Represents approximately 98 per cent of total stocks in the United States, exclusive of producers' stocks.



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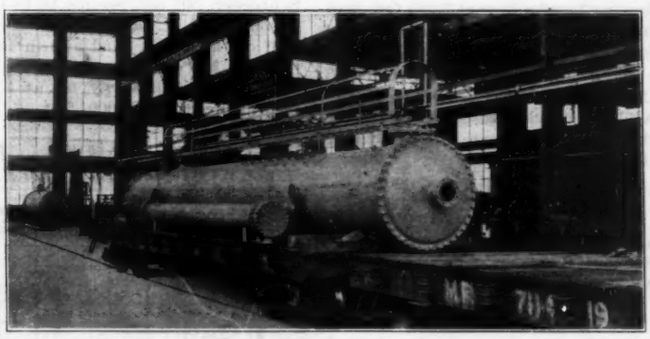

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Kansas Developments

STATE HAS 300 OPERATIONS AND WIDESPREAD WILDCATS

By JAMES McINTYRE

The Sunflower State ended the week in review with an even 300 operations under way in various stages of development. There were 15 new operations started of which four were wildcats. A summary of the completed wells in the State showed 11 oil wells for a combined initial 24 hours' capacity of 6,272 bbls. of oil; 1 gas well good for 2,000,000 feet daily, and 11 dry holes and 5 operations abandoned in an embryonic stage of development.

Scott County

Atlantic Oil Producing Co.'s No. 1 Mark "A," far western Kansas wildcat 2½ miles southwest of Atlantic's Mississippi lime discovery of the Shallow Water Pool, was shut down at 5,645 feet after recovering a core from 5,600-10 feet that showed water. Top of the Siliceous lime was thought to be near 5,560 feet. Location of the Mark "A" well is C SE SE Section 28-20-33w.

Trego County

Hansa & Lauck's No. 1 Lang, Trego County wildcat located in the SE SE NW Section 1-14-21w, after logging Topeka lime at 3,285 feet, had to set a whipstock due to a fishing job and it was drilling at 2,800 feet.

In the Wakeeney Pool of Trego County, Alma Petroleum Co. & McNeely were moving in materials for their No. 2 Heckman, C SW SE Section 11-11-23w.

Graham County

Helmerich & Payne Drilling Co. and others' No. 1 Stites, C SW SW Section 8-10-22w, Graham County wildcat, was drilling at 3,040 feet.

Rooks County

Phillips Petroleum Co. has topped Siliceous lime at 3,421 feet in its No. 1 Ordway, C NE NW Section 6-9-17w, and after having cemented 6-inch casing at 3,422 feet, plugs were drilled and the hole filled with water from 3,448-51 feet, total depth. It was then plugged back to 3,434 feet where it filled 2,000 feet with oil. Plugs were again drilled to 3,439 feet and 1,000 gallons of acid produced 2 bbls. of oil per hour. This well is one-quarter mile southeast of Phillips' No. 1 Dopita in Section 31-8s-17w, discovery well which made 178 bbls. of oil from the Siliceous lime.

Ellis County

Ashby's No. 1 Burns, SE SE NE Section 12-13-16w, south end of the South Fairport Pool but over in Ellis County, got only a small show of oil in the Oswald lime topped at 3,113 feet and at 3,190 feet and 3,280 feet, total depth, a hole full of water was encountered and the test abandoned.

About 9 miles northwest of the Yocemento Pool in northwestern Ellis County, Ellis County Oil Co. had cellar dug for No. 1 Freis in the SE SE NW Section 10-12-20w, a wildcat location.

Tom Palmer & Storm King Oil Co.'s wildcat, No. 1 Ruder, SE NE NW Section 17-15-18w, Ellis County, was drilling at 2,710 feet with an estimated 1,000,000 feet of gas at that depth.

Stanolind Oil & Gas Co. at its No. 1 Penney-Wann, NW SW SE Section 12-15-20w, Ellis County wildcat, topped K. C. lime at 3,298 feet, had oil show at 3,300 feet and was coring ahead at 3,350 feet.

Rush County

Morgan & Flynn and others had abandoned at 3,582 feet their No. 1 Gisick, NW NW SE Section 25-18-16w, wildcat test about three-quarters mile northwest of the Albert Pool discovery. LaMotte sand was topped at 3,508 feet and at 3,518 feet it made 3,000,000 feet of gas. A small spray of oil and water was had at 3,530 feet but a hole full of water came from 3,577-80 feet and it was then abandoned.

Schermerhorn Oil Co.'s No. 1 Schroeder, NE cor. Section 36-18-16w, a southwest offset to the discovery well of the Albert Pool and in Rush County, had LaMotte sand top at 3,577 feet, small spray oil at 3,598 feet; gauged 31,000,000 feet of gas at 3,606 feet and at 3,626 feet gas was killed with water. It was deepened to 3,636 feet and the hole unloaded and it was shut in with gas then gauging 22,000,000 feet.

Gypsy Oil Co. was moving in materials for its No. 1 Kraisinger, a Rush County wildcat location in the SE NE SE Section 23-18-17w.

Barton County

The Stechel Pool in Barton County was extended one-quarter mile southwest by the Gypsy Oil Co.'s No. 1 Steckel, NE cor. Section 1-20-11w. Siliceous lime from 3,268-79 feet, total depth, produced 583 bbls. of oil in 12¾ hours; however, it had not been completed.

D. J. Hall and others' wildcat, No. 1 Arnold, SE SE SW Section 19-18-15w, will not be drilled at this time and the location has been temporarily abandoned.

Russell County

Stanolind Oil & Gas Co.'s No. 36 J. E. Baxter, SE SE SW Section 32-13-15w, Gorham Pool in Russell County, found the Oswald lime 3,050-60 feet, good for 33 bbls. of oil on the pump the first 24 hours. Total depth was 3,132 feet, where the well began making water, and it was plugged back to 3,060 feet.

Tom Palmer's No. 1 Bender, SE SW SE Section 16-13-14w, Russell Pool in Russell County, was dry and abandoned in the Siliceous lime 3,270-3,345 feet, total depth.

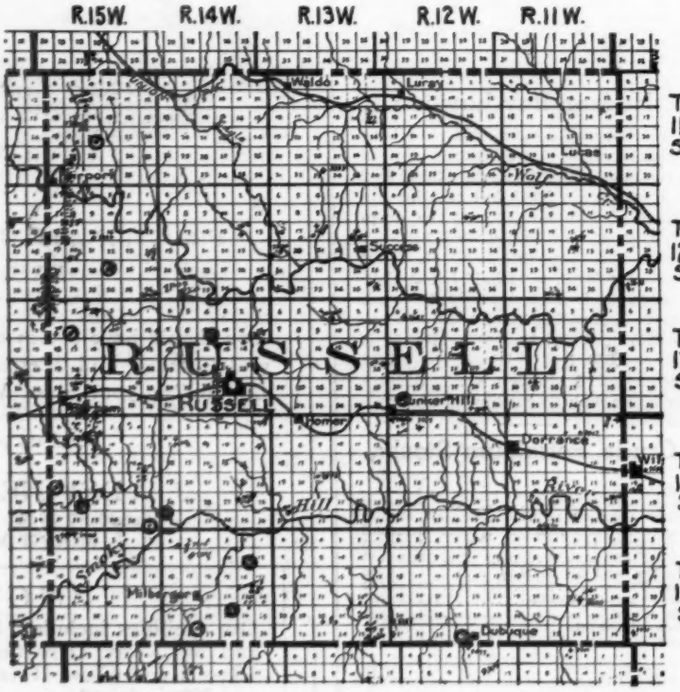
In the Neidenthal Pool, Lario Oil & Gas Co. and Texas Co.'s No. 2 Boxberger, SW NW NW Section 24-14-15w, Russell County, was completed on the pump for 1,024 bbls. of oil in 22½ hours, cutting 8 per cent water. Production is from Siliceous lime 3,259-62 feet, total depth.

Sinclair Prairie Oil & Gas Co.'s No. 3 Hefferman, NW SW NE Section 26-15-13w, Sellens Pool in Russell County, was completed on the pump for 120 bbls. of oil in 24 hours, producing in Siliceous lime logged at 3,253 to 3,255½ feet, total depth.

Gypsy Oil Co.'s No. 1 Pierce, NW NW SE Section 2-14-15w, logged Oswald lime at 3,056-81 feet, total depth, pumping 108 bbls. of oil in 14 hours. This well is a diagonal southeast offset to the somewhat freakish Topeka lime producer of Hartman & Blair's which flowed 4,075 bbls. in 24 hours from that formation.

J. C. Schaffer, Inc.'s No. 1 Cram, NE NE SE Section 11-14-15w, pumped 200 bbls. of fluid in 10½ hours (30 per cent water) after acidizing with 2,000 gallons the Siliceous lime from 3,298-3,305 feet, total depth. This test is 1 mile south of the Sullivan Pool and 1 mile north of the Neidenthal Pool in Russell County.

The only new operation in Russell County during the week in review was Billings and others' No. 5 Witt, NW NE SE Section 4-14-15w, in the Gorham Pool. It was a cellar.



—By courtesy of Kelly Map Co., Tulsa.

Russell County, Kansas, wildcats at present active are spotted on the accompanying map

Kansas Production

Estimated daily average production of Kansas for the week ended July 6 and for the preceding week follows:

	Barrels	
	July 6	June 29
Burrton	22,650	23,375
Ritz-Canton	8,050	7,350
Hollow	3,875	3,775
Voshell	4,200	4,075
Johnson	1,195	1,250
Nikkell	3,600	3,600
Sedgwick County	8,950	8,725
Ellsworth County	5,655	6,520
Barton County	1,495	2,200
Rice County:		
Chase Pool	16,125	17,100
Remainder	7,520	7,625
Ellis County	215	209
Kingman County	816	710
Stafford County	1,357	2,370
Russell County	13,175	12,500
Greenwood County	10,900	10,900
Butler County	18,550	18,600
Other pools	16,872	16,616
Total Kansas	145,200	147,500

Ellsworth County

Western Exploration Co.'s No. 1 Wilkins, NW SW NW Section 9-17-9w, southwestern Ellsworth County wildcat 3 miles east of the Stratman Pool, was dry in the Siliceous lime found at 3,350-55 feet, total depth, getting a hole full of water and the test had been abandoned.

Cable tools were being rigged up to drill in the Phillips Petroleum Co.'s No. 1 Melchert, NE SW NE Section

23-17-9w, Lorraine Pool in Ellsworth County. Siliceous lime was recorded at 3,188 to 3,194 feet, total depth.

Carter Oil Co. and other's No. 1 Ogden, NE NE SW Section 26-17-9w, Teubner Pool, drilled Siliceous lime from 3,183-87 feet, total depth, where it potentialed 715 bbls. of oil. Another potential test is to be taken on this well.

Carter Oil Co. and others' No. 1 Williams, SW SW NE Section 26-17-9w, Teubner Pool, had Simpson formation top at 3,185 feet and Siliceous lime from 3,196 to 3,197 feet, total depth, getting a show of oil in the latter formation. Six-inch casing is to be cemented before drilling in.

Vickers Petroleum Co. and others' No. 2 Janssen, NW SW NW Section 13-17-9w, Lorraine Pool in Ellsworth County, had been completed for 2,077 bbls. in 24 hours on the pump in Siliceous lime at 3,210-14 feet, total depth.

Atlantic Oil Producing Co. had completed its No. 6 Rolfs, SE NW SE Section 14-17-9w, Lorraine Pool, in Siliceous lime at 3,187-91 feet, total depth, for 1,163 bbls. of oil in 18 hours on the pump.

Skelly Oil Co. had made location for its No. 1 Dees in the NE NE SW Section 14-17-9w, Lorraine Pool.

Stafford County

Courtney B. Davis and others have definitely opened a new producing spot in Stafford County in their No. 1 Riley, a wildcat 1½ miles northeast of the Richardson Pool and located in the SE cor. Section 19-22-11w. Siliceous lime 3,589-3,606 feet, total depth, potentialed 185 bbls. of oil and 17 bbls. of water in 24 hours on the pump. It is to be plugged back a few feet to shut off the water and then acidized.

Helmerich & Payne Drilling Co. and others' No. 1 Geisler, Stafford County wildcat northwest of the Richardson Pool, and located in the NW NW SE Section 28-22-12w, had Viola lime at 3,612 feet, topped Simpson at 3,650 feet and at 3,675 feet the hole was caving badly.

Rose Spring Drilling Co. and others were moving in material for No. 1 Toland, NW NW SW Section 2-25-14w, a wildcat venture in southwestern Stafford County.

Rice County

Rice County's most important development the past week was the completion of Vickers Petroleum Co. and others' No. 1 Gouldner, SE NE NW Section 16-18-9w, Siliceous lime discovery of a few days earlier. Siliceous lime 3,224-30 feet, total depth, produced 622 bbls. of oil in 17½ hours on the pump.

E. F. Jones' No. 1 Murphy, SW SW SE Section 21-19-9w, in the Beyers-Chase Pool in Rice County, which had spudded in, has been temporarily abandoned.

Anderson & Kerr and others' No. 1 Lackey, NE SE NW Section 13-21-6w, wildcat well southeast of the Welch Pool in southeastern Rice County, was abandoned at 3,564 feet. Chat formation topped at 3,465 feet indicated water in a core from 3,494-3,513 feet.

There was only one new operation in Rice County during the week. Gypsy Oil Co. had made a location in the NW NW SW of Section 5-20-9w for its No. 1 Coffman.

The Steckel Pool in Rice County was promised a 1-mile extension to the east in John Burton and others' No. 1 Wendel, SW NE Section 32-19-10w. A hole full of oil was had from the Siliceous lime at 3,289-93 feet, total depth. No test had been made of production. This test, coupled with the Gypsy Oil Co.'s No. 1 Steckel, a one-half mile extension to the southwest, gives the Steckel Pool all the earmarks of a fair sized pool.

Reno County

Gypsy Oil Co. at its No. 1 Tonn, SW NW SE Section 16-25-4w, situated midway between the Hilger Pool and the Stone Pool, a wildcat being drilled on seismographed area, had top Simpson at 4,029 feet, hole full of water at 4,030 feet, top Siliceous lime at 4,126 feet and was drilling at 4,127 feet.

Haynes Brothers and others' No. 1 Mueller, a wildcat drilling in the SE NW Section 30-24-4w, Reno County, had logged the Chat at 3,350 feet and a test taken at 3,405 feet, showed a small amount of mud, oil and salty water. Seven-inch casing has been cemented at 3,365 feet and cable tools were being rigged up.

Bradley Drilling Co. had temporarily abandoned its No. 1 Olmstead, a cellar in the SW cor. Section 22-22-7w, Reno County.

W. C. McBride and Derby Oil Co.'s No. 1 Grandon, NW NE NE Section 3-24-4w, Burrton Pool in Reno County, was completed in the Chat at 3,253-3,368 feet, flowing 443 bbls. of oil in 24 hours. This well had considerable oil in the Hunton lime and lots of water. A hole full of water was encountered in the Siliceous lime at 3,811-17 feet, total depth, and it was then plugged back to the chat.

In the Stone Pool in Reno County, Kilgore & Hansen and others had abandoned location for their No. 1 Myers, C SE SW Section 10-24-4w, Reno County.

Anderson & Kerr and others were moving in material for their No. 1 Davies, NE cor. Section 28-23-7w, Reno County wildcat.

Morris County

Ryan Drilling Co. and others' No. 1 Gnagney, C SE NE Section 9-17-7, Morris County, was temporarily abandoned at 300 feet.

McPherson County

Mead Brothers and others' No. 1 Chindberg, SE NW SE Section 19-18-2w, McPherson County, was completed for 2,000,000 feet of gas in the Chat at 2,919-2,965 feet, total depth.

New operations in McPherson County were: W. C. McBride and others' No. 1 Gustafson, C NW NW Section 12-19-2w, being deepened from 2,967 feet. At 2,973 feet there was 2,000 feet of fluid in the hole. Kanokla Oil & Gas Co.'s No. 3 Giffin (O.W.D.D.), SE SW SW Section 14-19-2w, had been deepend to Wilcox sand 3,432-58 feet and not getting production it was to be plugged back to the chat.

Harvey County

Sunray Oil Co. and others' No. 1 Sperling, NE SE NE Section 23-22-2w, Sperling Pool in Harvey County, topped Simpson dolomite at 3,430 feet; total depth 3,463 feet, shot 70 quarts of nitro and swabbed 115 bbls. of oil in 18 hours, settling to 1 bbl. of oil per hour. It had not been completed.

Shell Petroleum Corp. had made a location in the NW NE Section 8-22-3w, Nikkell Pool in Harvey County for its No. 1 Siemens.

The discovery well in the Sperling Pool, Imo Oil & Gas Co. and others' No. 1 Sperling, SE NE NE Section 23-22-2w, was being cleaned out at 3,345 feet to be deepened. This well produced 1,625 bbls. of oil first 24 hours in the Hunton lime for its original completion record.

Sumner County

E. B. Shawver and others' No. 2 Neal, NE S ESE Section 29-31-1w, Wellington Pool in Sumner County, found Chat at 3,660-3,700 feet, total depth, good for 225 bbls. of oil in 24 hours on the pump and it was completed.

Barnsdall Oil Co. was rigging up tools to deepen its No. 3-A Wenrich, 200 feet south and 1,100 feet west of the NE cor. NW quarter Section 23-32-2, Oxford Pool in Sumner County. Total depth is 1,352 feet.

In the same area, Shell Petroleum Corp. was preparing to deepen its No. 3 Barnes, C E line SW SW Section 14-32-2, Sumner County. Old total depth was 2,106 feet.

E. B. Shawver had rig up for his No. 2 Erker, C N half S half NW Section 33-31-1w, Wellington Pool in Sumner County.

Sedgwick County

Aylward Drilling Co. and Shell Petroleum Corp.'s No. 2 Stolle, NW SE SW Section 11-26-2, Greenwich Pool in Sedgwick County, pumped 563 bbls. of oil first 24 hours from Chat formation at 2,839-2,840 feet, total depth. It was also making an estimated 63 bbls. of water daily.

Chase-Greenwood Counties

Polhamus and others have abandoned their No. 4 Leedy, NE SE NW Section 25-22-9, Chase County, at 2,420 feet. A show of oil was had in sand at 2,400-11 feet.

Houston Oklahoma Oil Co. had a hole full of water from the Mississippi lime 1,748 to 1,776 feet, total depth, in their No. 1-A Pegram, C NW NW Section 33-23-13e, Greenwood County, and the well had been abandoned.

Butler County

Bennett and Abels' No. 1 Lang, NE SE Section 2-25-3, Butler County, had a small show of oil at 2,719-24 feet, Mississippi lime, but was abandoned at 2,751 feet, total depth.

Hay & Cameron's No. 1 Johnson, semiwildcat in the NW SE Section 16-26-6e, Butler County, was dry and abandoned at 3,218 feet. Viola lime was logged at 3,200 feet and a small show of oil was had at 3,202 feet. Water showed up at 3,204 feet.

C. L. Siebel's No. 1 Taylor, SE NW NW Section 29-29-4, Butler County, was dry and abandoned in the K. C. lime at 1,975 feet, total depth.

Chautauqua County

Central Oil Co.'s wildcat in Chautauqua County, No. 1 Crews, NE NE SW Section 8-32-12e, topped Mississippi lime at 1,740 feet, encountered a hole full of water at 1,775 feet, total depth, and the test was abandoned.

Ben G. Barnett and associates' No. 1 Phillips in the new extension area at the extreme north end of the East Texas Field in Upshur County. Mr. Barnett is shown at the extreme right. This well, like others drilled by these operators in the same area, was drilled into the sand by cable tools in contrast to the conventional rotary tools

Alberta Border Fields

On the Del Bonita structure, Terminal Oil Co.'s No. 1, NE Section 18-1-21w4 is below 3,696 feet. Interests associated with the Terminal company and represented by Richard R. Davidson, Aeriel Carson and Clarence D. Turner of Lethbridge, Alberta, have organized Del Bonita Petroleum, Ltd. at Lethbridge, with acreage in the Del Bonita area.

In the Red Coulee Field, Vanalta's No. 7, LSD 3, Section 4-1-16w4, is below 2,724 feet.

Nordon Corp., Ltd., of Calgary and Los Angeles has located a test in Northern Montana about 7 miles southwest of Valier on the structure in NW NW NW Section 12-26n-6w. Geology was checked by Dr. Robin Willis for Nordon Corp. and contract has been let to B. E. Adams of Conrad, Mont., to spud early in July.

On the Comrey structure, southeastern Alberta, Comrey Oil Co.'s No. 1, Section 9-1-5w4 is below 228 feet.

WILDCAT OPERATIONS

OKLAHOMA WILDCATS

Week Ending July 6

NORTHERN OKLAHOMA

Beckham County

E. L. Martin et al's No. 1 Robertson, C NE SE Sec. 1-9-22w.
Spudded and S.D.

Star Oil Co.'s No. 1 Blair, C NW SE Sec. 32-9-26w.
Cellar and pits dug (3,200-ft. test).

Blaine County

Earl Ingraham et al's No. 1 Masters, SW NW NW Sec. 27-16-11w.
S.D. 1,240 ft.

Caddo County

Denver Prod. & Ref. Co.'s No. 1 Sah-Can, C SE SE Sec. 33-10-10w.
Drlg. 7,550 ft.

H. W. Lee et al's No. 1 Stacey Ferrell, SW NE NE Sec. 3-6-13w; (2,000-ft. test).
Drlg. 2,290 ft.

F. A. Turner et al's No 1 Spain, NE NE SW Sec. 1-5-11w.
Spudded.

Canadian County

R. Carl Larkin's No. 1 Brobine, NW NW NE Sec. 33-13-5w.
T.D. 7,740 ft.; top of Mississippi lime 7,708 ft.; dry and abd.

Cleveland County

Ana Lee Mayes, Inc.'s No. 1 Faut, SW SW NE Sec. 27-10-2w.
Cellar and pits.

Coal County

Amerada Pet. Corp. and Stanolind Oil & Gas Co.'s No. 1 Traveler' Life, SW NW SE Sec. 28-1s-3e.
Wapanucka 2,520 ft.; drlg. 2,925 ft., in shale.

Carter Oil Co. et al's No. 1 Thompson, C S½ NE NW Sec. 34-2-9.
Drlg. 3,455 ft.

Comanche County

R. B. Carson's No. 1 Barber, NE NE SE Sec. 9-1n-11w.
S.D. 500 ft.

Oscar Jones' No. 1-A Sheets, NE SW Sec. 26-2-10w.
Machine.

F. F. Stevens' No. 1 Green, SE SW Sec. 2-1-13w.
T.D. 1,735 ft.

Garvin County

Charles Carter and W. S. Key, Inc.'s No. 1 Wood, C NW SW Sec. 5-4-3e.
S.D. 2,405 ft.

Grant County

Helmerich & Payne's No. 1 Crouse, C NE SW Sec. 29-25-8w.
Drlg. 6,385 ft. in shale.

Wentz Oil Corp. et al's No. 1 Wirtz (Community), SE SE NW Sec. 22-28-4w.
Moving in material.

Greer County

Gled Oil Co.'s No. 1 Simpson, NE cor. Sec. 11-6-22w.
Granite wash 730 ft.; water 730-31 ft.; drlg. 930 ft.

Gled Oil Co.'s No. 1 Leeker, SE cor. Sec. 6-4-21w.
Drlg. 1,920 ft.

Massad & Caudle's No. 1 Crosnoe, SE SE SW Sec. 14-3-25w.
Rig.

Morgan et al's No. 1 Carder, C SW SE Sec. 19-4-22w.
T.D. 3,220 ft.; fishing for drill pipe.

H. N. Payne et al's No. 1 Tressell, NW cor. Sec. 1-7-22w.
T.D. 1,785 ft.; U.R. 8-in. csg.; to deepen.
Cleaning out.

Harmon County

J. J. Mathis' No. 1 Keith, NE NW SW Sec. 12-5-26w.
Machine on ground.

Hughes County

Caprock Oil Co.'s No. 1 Parks, SW SW SE Sec. 34-7-8.
Rig.

Dandridge & Crane's No. 1 Mead, NW NW NE Sec. 17-5-9.
Dry and abd. 1,719 ft.

Freeman et al's No. 1 Kite, NW NW NE Sec. 3-6-10.
Top sand 700 ft.; show oil; S.D.

Texas Co.'s No. 1 Keaton, NW SW Sec. 4-8-10.
Wilcox 4,662-75 ft.; dry; P.B. to 4,020 ft.; drilled plug; 1,000,000 ft. of gas; show of oil and water.; T.D. 4,084 ft.; plugging back.

Kay County

Bay Oil Co.'s No. 1 Holden, SW SW SE Sec. 14-28-3.
8-in. 2,945 ft.; drlg. plugs.

Lewis Prod. Co.'s No. 1 Summers, SW cor. SE NW Sec. 17-27-2.
Drlg. 815 ft.

J. T. Lindsay's No. 1 Waggoner, NW NW NE Sec. 3-27-1.
T.D. 2,393 ft.

Marshall, Haddock et al's No. 1 Hermes, SW SW NW Sec. 6-26-4.
Drlg. 730 ft.

Kiowa County

Rajah Oil Co.'s No. 3 Stone, C SE NE Sec. 34-7-17w.
Gas 933-34 ft.; oil 944-82 ft.; recmtd. csg.; T.D. 1,040 ft.; S.D.

Leflore County

McCraw et al's No. 1 Tidwell, C NW SE Sec. 17-3-22.
T.D. 74 ft.; will run 20-in. pipe.

Lincoln County

Carter Oil Co. et al's No. 1 McFarland C-33, SW SW NE Sec. 18-13-4.
Wilcox sands at 5,279 ft. and 5,335 ft.; T.D. 5,345 ft.; will make Schlumberger test.

Chester L. Carlock's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Chas. Ralph's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Stanolind O. & G. Co. and Amerada Pet. Corp.'s No. 1 Connelly, SE NE SE Sec. 23-14-2.
Drlg. 1,260 ft.

Stanolind O. & G. Co. and Amerada Pet. Corp.'s No. 1 Cavanaugh, SE NE Sec. 31-15-5.
Drlg. 5,785 ft.

Texas Co.'s No. 1 Niccum, SE SW NW Sec. 28-14-5.
Mayes 4,290 ft.; Sycamore 4,505 ft.; drlg. 4,575 ft.

Logan County

Sinclair Prairie and Slick-Urschel's No. 1 Koatsch, SW cor. Sec. 23-15-3w.
Second Wilcox 6,322 ft.; T.D. 6,341 ft.; cored 6,341-43 ft.; P.B. to 6,322½ ft.; bailed to bottom, no salt water, fresh water and oil in hole.

Slick-Urschel et al's No. 1 Pennington, C SW NE Sec. 10-16-1w.
Simpson dolomite 5,534 ft.; Wilcox 5,581 ft.; no show; lost circulation at 5,587 ft.

Stanolind O. & G. Co., Amerada Pet. Corp. and Eason O. & R. Co.'s No. 1 Gragg, SW SW NE Sec. 20-18-4w.
Cellar.

Stanolind O. & G. Co. et al's No. 1 Nunn, SE NW Sec. 25-15-1.
Drlg. 2,597 ft.

Texas Co. et al's No. 1 Wood, SW NE Sec. 34-15-4w.
Location.

Major County

Indian Territory Illuminating Oil Co. and Continental Oil Co.'s No. 1 Fairview, C E½ SW SE Sec. 32-22-14w.
Drlg. 4,860 ft.

Noble County

Marathon Oil Co.'s No. 1 Gilbert, NE cor. Sec. 24-22-2.
Wilcox sand 4,449 ft.; T.D. 4,480 ft.; flowed 1,793 bbls. in 7 days; may deepen.

Okfuskee County

Amerada Pet. Corp.'s No. 1 Jaynes, NW NW SW Sec. 20-10-10.
Hunton 3,690 ft.; 10,000,000 ft. of gas at 3,704 ft.; Wilcox sand 3,932 ft.; T.D. 4,025 ft.; 275 ft. wtr. in hole; P.B. to 3,882 ft.; P.B. to 2,962 ft.

Sunray Oil Co.'s No. 1 Culla, NE SW NE Sec. 13-12-8.
Rig.

Oklahoma County

Gypsy Oil Co. and Indian Territory Illuminating Oil Co.'s No. 1 Salisbury, NW NE NE Sec. 13-14-4w.
Drlg. 5,612 ft.

Sinclair Prairie O. & G. Co.'s No. 1 Corbett, NE NW NE Sec. 17-12-3w.
Top of sand 6,645 ft.; cored 6,645-85 ft.; chiefly gas cored 6,685-90 ft., a little oil and gas; cored 6,690-6,706 ft., gas and oil; will run tubing and wash in with water.

Osage County

J. A. Freeberg et al's No. 1, NE cor. SE Sec. 1-25-6.
R.U. machine.

Pawnee County

Stanolind O. & G. Co.'s No. 1 Shunatana, NE SW SE Sec. 22-22-3.
Rigging up.

Pittsburg County

Choctaw Gas Co.'s No. 1 Bunyard, SE SE NE Sec. 18-7-15.
Drlg. 1,305 ft.

McAllister Pet. Corp. et al's No. 1 Chunn, C SE NW Sec. 29-4-14.
T.D. 1,530 ft.; pipe collapsed; S.D.

P. H. Gray et al's No. 1 Lee, NW SE Sec. 12-5-12.
Dry & abd. 1,210 ft.

Pontotoc County

E. M. Blanchard's No. 1 Crabtree, NE SE NE Sec. 27-3-6.
S.D. 2,920 ft.

Philip Boyle's No. 1 McCracken, NE NW NW Sec. 31-5-4.
Pumped salt water, will deepen from 2,173 ft.

Charles E. Carter's No. 1 Wood, NW SW SE Sec. 5-4-3.
S.D. 2,405 ft.

Continental Oil Co.'s No. 1 McCarty, C SW NW Sec. 12-1-7e.
Rig.

Crabb-Craw Oil Co.'s No. 1-A Breco, SE NE SW Sec. 3-4-6.
Sand 1,106-18 ft.; pumped 10 bbls. in 24 hrs.; S.D.

W. A. Delaney et al's No. 1 Fulsome, SE NE Sec. 35-4-6.
Location.

Fleetborn Oil Corp.'s No. 2 Oliver (twin), 280 ft. S and 1,040 ft. E of C Sec. 21-4-5.
Gas at 848-55 ft.; wtr. at 938 ft.; T.D. 950 ft.; fishing.

Franks Bros.' No. 1 Abbott, SW NW NE Sec. 34-3-6.
Location.

Gillette & Kroeger's No. 1 Duver, NW NW SE Sec. 36-1n-6e.
T.D. 1,325 ft.; C.O.

Southern Oil Co.'s No. 1 Perry, SW SW NW S.c. 11-4-6.
Rig on ground.

Southern Oil Co.'s No. 1 Walker, NW NW SW Sec. 11-4-6.
H.F.W. 1,530 ft.; P.B. and shot with 20 qts. at 1,162-72 ft.; no test.

Leonard Williams et al's No. 1 Breedon, NW cor. Sec. 6-2-5.
Spudded, rigging up standard tools.

Pottawatomie County

Paul Traugh et al No. 1 Lowry, near C NE SE NE Sec 30-6-5.
Drlg. 320 ft.

Pushmataha County

Ungerman et al's No. 1 Misser, SE SW SW Sec. 35-3s-18e.
T.D. 3,196 ft.; waiting for fuel.

Seminole County

Carter Oil Co. and Shell Petroleum Corp.'s No. 1 Brown, C W½ SE SW Sec. 23-8-5.
Drlg. 3,425 ft.

L. Cooper's No. 1 Chandler, NE SE SW Sec. 4-5-6.
S.D. 1,780 ft.

Ray Dorris and J. T. Hall's No. 1 Dorris, SE SE SW Sec. 31-10-7.
Sand 520-60 ft.; H.F.W.; S.D. 608 ft.

Van Deventer et al's No. 1-A Bender, NE NE SW Sec. 3-8-8.
Drlg. 2,354 ft.

Verser & Clay et al's No. 1 Thomas, NE SE NW Sec. 1-6-6.
T.D. 2,802 ft.; set whipstock at 2,740 ft.

Tom Phillips et al's No. 1 Abbott, NE cor. Sec. 33-8-7.
Wilcox 4,239-51 ft., dry; P.B. to 3,198 ft., 2,000 ft. oil in hole, testing.

Washita County

Okla-Midwestern Oil Co.'s No. 1 Dock, SW cor. Sec. 21-8-18w.
T.D. 2,430 ft.; lost tools in hole; rig rebuilt; drlg. 2,500 ft. in lime.

L. P. McWhirter's No. 1 fee, SW cor. Sec. 24-8n-19w.
Drlg. 590 ft.

SOUTHERN OKLAHOMA

Atoka County

Clark et al's No. 1 Morrison, SE cor. Sec. 32-1-14.
S.D. 200 ft.

Clark et al's No. 1 Bass, 510 ft. N and 1,170 ft. E of C Sec. 9-1s-14e.
Fishing 1,250 ft.

Keaton et al's No. 1-A Roland, NE cor. NW NE NE Sec. 16-3s-10e.
T.D. 850 ft. (corrected); lime at 800-47 ft.; will treat.

Mid-Continent Petr. Corp. et al's No. 1 Fulton, SW cor. Sec. 19-1s-12e.
Building rig.

R. H. Pierce et al's No. 1 Aetna Life Ins. Co., NW SW NE Sec. 10-1n-13e.
Drlg. 750 ft.

Vierson et al's No. 1 Williams, NE SW NW Sec. 32-2s-10e.
Rigging up.

Bryan County

Welch Oil Corp.'s No. 1 Collins, NE NE Sec. 19-8s-8e.
Drlg. 650 ft.

J. D. Parks' No. 1 Conts, SE NE SW Sec. 1-5s-8e.
T.D. 325 ft.; S.D.

H. B. Smith et al's No. 1 Henry, C NW NE Sec. 10-8s-7e.
Rig (4,500 ft. test).

Trio Oil Co.'s No. 1 Gilbert, SW NE SW Sec. 25-8s-7.
U.R. 8¼-in. csg. to 835 ft.

Carter County

Bland et al's No. 1 Center, NE cor. Sec. 6-4s-2e.
Drlg. 125 ft.

Waco Turner's No. 1 Munson, NE NW NE Sec. 35-5s-2w.
Drlg. 4,550 ft.

Carter Oil Co.'s No. 1 Carter-Williams, SW NE SW Sec. 27-2s-3w (7,000-ft. test).
Drlg. 6,456 ft., in lime.

Paul Robb's No. 1 Burton, 660 ft. N and 185 ft. W of C Sec. 31-1s-2w.
Location.

Choctaw County

E. B. Abernathy's No. 1 Christian, 400 ft. N and 1,245 ft. W of SE cor. Sec. 1-6s-19e.
Drlg. 290 ft.

Jackson County

J. G. Buel et al's No. 1 Kizziar, SE SE NE Sec. 2-2n-22w.

Associated Oil Co.'s No. 1 Harrell, NE NE SE Sec. 13-1s-21w.
S.D. 875 ft.; red beds.
Granite wash 2,480-2,504 ft.; T.D. 2,504 ft.; S.D.

Dengall Oil & Gas Co.'s No. 1 Robinson, SE SE NE Sec. 32-1s-22w.
Drlg. 1,000 ft., red bed.

Gypsy Oil Co.'s No. 1 Boucher, NW SW SW Sec. 32-1-19w.
Drlg. 2,295 ft.

Gypsy Oil Co.'s No. 1 Stokes, SE NW SW Sec. 11-1-20w.
Lime 1,709-11 ft.; T.D. 1,722 ft.; S.D.

Marshall & Burnham's No. 1 Hess, NE SW NE Sec. 27-1s-20w.
T.D. 1,737 ft.; S.D.

Palo Duro Oil Co.'s No. 1 Ealum, SW SW SE Sec. 16-2-21w.
Drlg. lime, 1,710 ft.

Robberson & Suppes' No. 1 Walker, SW cor. Sec. 19-4-20w.
Dry and abd. 1,600 ft.

Triangle Oil Co.'s No. 1 Fox, E½ W½ NW Sec. 11-3n-20w.
Drlg. 490 ft.

Whatley & Whatley's No. 1 Holt, NW SW SE Sec. 20-1n-20w.
S.D. 1,430 ft.

Jefferson County

Gypsy Oil Co.'s No. 1 James, SW SE SE Sec. 30-6s-6w.
S.D. 2,102 ft.

G. W. Hewell et al's No. 1 Currey, SE SW Sec. 36-4s-9w.
Location.

Ben H. Levy et al's No. 1 Ryan, NW cor. Sec. 16-6s-6w.
Dry and abd. 2,361 ft.

Johnston County

W. A. Delaney et al's No. 1 Diamond, NW NE SE Sec. 5-1s-8.
Drlg. 2,100 ft.

M. A. Neff and R. A. Godfrey's No. 1 Ford, NE SE NW Sec. 13-4s-5.
Rigging up.

Schermerhorn Oil Co.'s No. 1 Rich, SW SE SE S c. 35-4s-4e.
Drlg. 674 ft., green shale and lime.

Love County

Sinclair Prairie Oil Co.'s No. 1 Stockton, SE SE SW Sec. 26-6s-2w (5,000 ft. test).
Moving in rig.

Marshall County

Jess Cook et al's No. 1 May, NE NW Sec. 12-8s-5.
Drlg. 75 ft.

Norman Smith's No. 1 Chestnut, NE cor. Sec. 23-8s-5e.
R.U. machine.

Paul Robb's No. 1 Vittetoe, C NE SE Sec. 11-5s-4e.
Top Sylvan shale 5,405 ft.; T.D. 5,461 ft.; S.D.

Murray County

Equitable O. & G. Co.'s No. 1 Ferguson, NE NE SW Sec. 36-1s-3.
Drlg. 1,411 ft.

Stephens County

Wm. Angle et al's No. 1 Cooper, NE NW NW Sec. 23-2-7w.
Drlg. 4,280 ft.

Geo. Pace et al's No. 1 Randel, SW NE Sec. 22-2s-7w.
Rigging up.

Geo. Pace et al's No. 1-A Damron, SE SE SW Sec. 25-2s-6w.
Location.

Geo. Pace et al's No. 1 Daily, NE NE NE Sec. 26-1n-8w.
Dry and abd. 3,552 ft.

Tillman County

J. G. Buell et al's No. 1 Haught, SE NE Sec. 22-1-16w.
Drlg. 828 ft.

Rock Island Ref. Co.'s No. 1 Lynch, C SE SW Sec. 35-1s-16w.
T.D. 1,047 ft.; fishing for U.R. lug.

Loper et al's No. 1 Conrad, NE cor. Sec. 35-1s-19w.
Drlg. in brown shale 1,660 ft.

KANSAS WILDCATS

Week Ending July 6

(Descriptions are East unless marked otherwise)

Barber County

Southern Drlg. Co. et al's No. 1 Davis. 330 ft. from W and 330 ft. from S lines of NE Sec. 13-34-15w.
T.D. 4,664 ft.; standardizing.

L. H. Wentz' No. 1 Skinner, SE NW NW NE Sec. 29-31-14w.
Ran 8-in. csg. to 3,420 ft.

Barton County

Lario O. & G. Co. and McCoy's No. 1 Dolochek, NE NW NE Sec. 13-16-12w.
Siliceous 3,320 ft., show of oil and water 3,320-25 ft.; T.D. 3,328 ft.

Lario O. & G. Co. et al's No. 1 Nuss, NW SW SW Sec. 11-16-14w.
Oswald 3,155 ft.; shows of oil 3,341-88 ft.; H.F.W. 3,393 ft.; P.B. to 3,391½ ft.; acidized; pumped 8 bbls. oil and 15 bbls. wtr.; reacidized.

Palmer Oil Corp.'s No. 1 Morris, SE NW NE Sec. 6-19-15w.
T.D. 420 ft.

C. L. Price et al's No. 1 Ehrlich, NW SE Sec. 10-16-13w.
S.D. 1984 ft.

Pryor & Lockhart's No. 1 Herrington, NE NW Sec. 6-16-12w.
Siliceous 3,350 ft., oil showing 3,346-54 ft., hole full water 3,387 ft.

Suppes & Witt's No. 1 Hayes, NW cor. Sec. 7-16-15w.
Drlg. 2,300 ft.

Torrey & Feaster's No. 1 Feist, NE NE SE Sec. 29-18-11w.
Drlg. 553 ft.

Butler County

Hay & Cameron's No. 1 Johnson, NW NW SE Sec. 16-26-6.
Dry and abd. 3,218 ft.

Pelhamus et al's No. 2 Semisch, C S½ NE NE Sec. 5-28-7.
Drlg. 1,600 ft.

Sanford et al's No. 1 Cron, SE SE SE Sec. 1-28-4.
K.C. lime 1,865 ft.

Ward McGinnis' No. 1 Jackson, SW NE Sec. 26-25-8.
Drlg. 750 ft.

Western Kansas O. & R. Co.'s No. 1 King & Marshall, NW NW SW Sec. 11-28-6.
Drlg. 600 ft.

Chautauqua County

Central Oil Co.'s No. 1 Crews, NE NE SW Sec. 8-32-12.
H.F.W. and abd. 1,775 ft.

Clay County

Seidel Bros.' No. 1 Younken, C S½ SE NW Sec. 21-9-4.
Mississippi 1,772-81 ft.; est. 25 bbls. oil and some wtr.; P.B. to 1,773 ft.; S.D.

Cowley County

Baden, Johnson, Roth & Faurot's No. 1 David, NE SW Sec. 35-30-4.
Drlg. 1,440 ft.

Lloyd, Frost & Study's No. 1 Weathered, SW SE SE Sec. 28-31-3.
Siliceous lime 3,339 ft.; pumped 92 bbls. of oil and 47 bbls. of wtr. in 17 hrs.; H.F.W. 3,405 ft.; P.B. to 3,370 ft.

Wakefield's No. 1 Tharp, SE SE NE Sec. 10-32-3.
Drlg. 1,395 ft.

Dickinson County

Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1e.
Hunton 2,808 ft.; H.F.W. 2,812 ft.; S.D. 2,880 ft.

Elk County

Hicks et al's No. 1 Lewis, SW SE SE Sec. 35-31-10.
Oswego lime 1,652-70 ft.; 20-bbl. oil showing; acidized.

Ellis County

Joe Aylward's No. 1 Dreiling, SE SE SE Sec. 3-14-16w.
U.R. 8-in. to 2,655 ft.

Ellis County Oil Co.'s No. 1 Freis, near C SE SE NW Sec. 10-12-20w.
Cellar.

Helmerich & Payne et al's No. 1 Kuhn, C NE quarter Sec. 16-14-20w.
Drlg. 2,655 ft.

Tom Palmer and Storm King Oil Co.'s No. 1 Ruder, SE SE NW Sec. 17-15-18w.
Drlg. 2,675 ft.

L. Roark et al's No. 1 Bemis, SE SE SE Sec. 16-11-17w.
Moving in material.

Stanolind O. & G. Co.'s No. 1 Penney-Wann, NW SW SE Sec. 12-15-20w.
K.C. lime 3,298 ft.; oil saturation at 3,323-27 ft.

Ellsworth County

Lario O. & G. Co.'s No. 1 State, SW SW SW Sec. 29-15s-8w.
S.D. 3,937 ft.

Western Exploration Co.'s No. 1 Wilkins, NW SW NW Sec. 9-17-9w.
Siliceous lime 3,350-55 ft.; H.F.W. abd.

Graham County

Helmerich & Payne et al's No. 1 Stites, C SW SW Sec. 8-10-22w.
Drlg. 3,040 ft.

Greenwood County

Foster & Schultz's No. 1 Ferguson, C S½ NE SW Sec. 12-26-13.
Drlg. 1,340 ft.

Harper County

Kessler, Thier et al's No. 1 Wolfje, SW SW SE Sec. 17-33-6w.
Drlg. 1,670 ft.

Harvey County

Goering Bros.' No. 1 Brainard, NE SW Sec. 3-23-2w.
Fishing 1,320 ft.

H. H. & S. Oil Co.'s No. 1 Frizzle, NE NE SE Sec. 31-23-2w.
Drlg. 222 ft.

Hartman & Blair et al's No. 1 Redinger, NW cor. Sec. 15-24-3w.
T.D. 628 ft.

L. W. Prunty et al's No. 1 Davis, NE cor. Sec. 6-22-1w.
Chat 2,922 ft.; drlg. 2,928 ft.

Twin Drlg. Co. et al's (O. J. Connell), No. 1 Ruth, SW cor. Sec. 16-22-2w.
Showing of oil 3,758 ft.; T.D.

Winkler Koch et al's No. 1 Mueller, SE SW NW Sec. 15-23-2w.
Drlg. 3,045 ft.

Kingman County

Derby et al's No. 1 Bartholomew, SW NW NW Sec. 8-27-4w.
Drlg. 2,822 ft.

Gypsy Oil Co.'s No. 1 Tonn, SW NW SE Sec. 16-25-4w.
Drlg. 1,280 ft.

Sam Jarvis et al's No. 1 Morrisse, C SE NE Sec. 23-30-10w.
Rig.

Kingman Oil Co.'s No. 1 Wetherall, NE NE SW Sec. 20-28-10w.
K.C. lime 3,628 ft.; S.D. 3,793 ft.; no oil showing.

McPherson County

Anderson & Kerr et al's No. 1 Lackey, NE SE NW Sec. 13-21-6w.
Dry and abd. 3,564 ft.

Carey & Miller's No. 1 Husband, SE SE NW Sec. 6-19-3w.
Rigged up.

Hollow, Toews & Hinkle's No. 1 Aschman, NW NW SE Sec. 8-21-4w.
Drlg. 480 ft.

Shell Pet. Corp.'s No. 1 Wenger, NE cor. Sec. 2-20-1w.
Viola 3,356-64 ft.; T.D.; swbd. 255 bbls. in 10 hrs.; 50% wtr.; acidized; potential production 100 bbls. oil, 620 bbls. of wtr.; P.B. to 3,359 ft.; pumped 80 bbls. of oil and 210 bbls. of wtr. in 7 hrs.; S.D. for pipe line.

Osage County

Jim Edwards' No. 1 Detrick, C NW SE Sec. 21-14-15.
Show oil and gas 783-800 ft.; T.D. 800 ft.

Reno County

Allison & Fitzwilliams' No. 1 Dukelow, NE NE NE Sec. 11-22-6w.
Cleaning out at 72 ft.

Andeason & Kerr et al No. 1 Davies, NE cor. Sec. 28-23-7w.
Moving in material.

Gypsy Oil Co.'s No. 1 Tonn, SW NW SE Sec. 16-25-4w.
Simpson 4,029 ft.; H.F.W. 4,030 ft.; Siliceous at 4,126-27 ft.

Haynes Bros.' No. 1 Mueller, SE SE NW Sec. 30-24-4w.
Run 7-in. csg. to 3,365 ft.; standardizing.

L. A. Mylius et al's No. 1 Sprowl, NE NW NE Sec. 1-24-5w.
Hunton 3,744 ft.; wtr. 3,747 ft.; H.F.W. 3,876 ft.; drlg. 3,916 ft.

Rice County

Detrick et al's No. 1 Conner, C NE NE Sec. 28-19-7w.
Cellar.

Detrick et al's No. 1 Monroe, C NE NE Sec. 9-20-7w.
Spudded.

Fred Rust et al's No. 1 Brown, NE cor. Sec. 16-21-6w.
Rigged up.

Three Rivers Oil Co.'s No. 1 Buehler, NW NW NW Sec. 17-18-8w.
Rigged up.

Vickers Pet. Co. et al's No. 1 Gouldner, SE NE NW Sec. 16-18-9w.
Siliceous lime 3,224-30 ft.; potential 622 bbls. 17½ hrs. on pump, completed.

Rooks County

El Dorado Refining Co.'s No. 1 Marshall, C SE SE Sec. 8-7-17w.
Rig.

Murfin et al's No. 1 Wasthusin, NE NE SE Sec. 19-9-16w.
Rig.

Smith & Ash's No. 1 Nelson, NW NW NE Sec. 27-10-16w.
Drlg. 1,360 ft.

Trees Oil Co. and Findeiss' No. 1 Johnson, SW SW SE Sec. 26-10-19w.
Drlg. 2,365 ft.

Rush County

Boyle & Grossman's No. 1 Wilson, NE NE NE Sec. 33-17-19w.
Cellar.

Boyle & Grosman et al's No. 1 Yost, C SW SW Sec. 28-17-18w.
H.F.W. 3,480-86 ft.; set 6-in. csg.; water at 3,525-30 ft. T.D.

Gypsy Oil Co.'s No. 1 Kraisinger, SE NE SE Sec. 23-18-17w.
Moving in material.

Lario O. & G. Co. et al's No. 1 Gillig, NE SE NW Sec. 24-17-17w.
Drlg. 1,128 ft.

Lario O. & G. Co. and Phillips Pet. Co.'s No. 1 Benbow, NW NE NE Sec. 12-17-19w.
T.D. 3,790 ft.; fishing.

Ramsey Pet. Co. et al's No. 1 Darkes, SW SW NW Sec. 5-17-20w.
Drlg. 3,450 ft.

Twin Drlg. Co. et al's No. 1 Appl, SW SW NE Sec. 29-17-17w.
Drlg. 1,260 ft.

Russell County

J. Brouk and R. D. Bailey's No. 1 Kleusner, NW SE Sec. 34-15-12w.
Drlg. 2,035 ft.

Buffalo Oil Co.'s No. 1 Kunz, NE NE SW Sec. 19-14-15w.
Moving in material.

Coraleana Oil Co.'s No. 1 Fiegler, SE SE SE Sec. 11-15-14w.
Rigging up.

Hartman & Blair's No. 1 Mills, SE SE SW Sec. 27-13-15w.
Rigging up.

Hartman & Blair's No. 1 Rexroat, NE NW NW Sec. 31-14-14w.
Oswald 2,920 ft.; show of oil at 2,951, 2,960 and 3,070 ft.; T.D. 3,080 ft.

Murfin et al's No. 1 Gorham estate, NE NE SE Sec. 29-14-15w.
Cellar.

Nassau Oil Corp.'s No. 1 Karst, NW SW NE Sec. 27-15-14w.
Rigging up.

Tom Palmer's No. 1 Machin, SW SW SE Sec. 9-13-14w.
Cellar.

Pryor and Lockhart's No. 1 Spicer, NE SE Sec. 21-11-15w.
U.R. 8-in. csg. to 2,530 ft.

Roth & Faurot's No. 1 Shaffer, NW NW NE Sec. 31-13-12w.
Spudded and S.D.

Stearns & Streeter's No. 1 Dreiling, SW SW SW Sec. 8-13-15w.
Building rig.

Vernon & Murphin's No. 1 Becker, NE cor. Sec. 32-15-14w.
S.D. 2,335 ft.

Wakefield & Armer's No. 1 Hall, NE SE SW Sec. 36-14-15w.
Siliceous lime 3,171-76 ft.; pumped 105 bbls. in 6 hrs.; C.O.

A. E. Sely et al's No. 1 Herman, SE NW Sec. 27-12-15w.
S.D. 450 ft.

Winkler & Koch's No. 1 Harman, SE SE NW Sec. 27-12-15w
Oswald 3,030 ft.; U.R. 6-in. csg.

Sedgwick County

Allison & Fitzwilliams et al's No. 1 Struthers, NE SW Sec. 34-28-2w.
Fishing at 3,225 ft. T.D.

Magnolia Pet. Co.'s No. 1 Bartholomew, SE SE SW Sec. 30-27-4w.
Chat 3,682 ft.; 9-in. 3,692 ft.; standardizing.

Scott County

Atlantic Oil Prod. Co.'s No. 1 Mark "A," C SE SE Sec. 28-20-33w.
Siliceous 5,555 ft.; cored some water 5,-600-10 ft.; coring.

Stafford County

C. B. Davis et al's No. 1 Riley, SE cor. Sec. 19-22-11w.
Siliceous lime 3,589-3-606 ft.; T.D. 5,630 ft.; pumped 145 bbls. of oil in 11 hrs.

Empire O. & R. Co.'s No. 1 Grove, NE NE NW Sec. 5-22-11w.
Drlg. 2,215 ft.

Helmerich & Payne's No. 1 Geisler, NW NW SE Sec. 28-22-12w.
Viola 3,611-25 ft.; Simpson 3,650 ft.; drlg. 3,673 ft. (correction).

Rose-Spring Drlg. Co.'s No. 1 Toland, NW NW SW Sec 2-25-14w.
Moving in material.

Sumner County

Allison & Fitzwilliams et al's No. 1-B Hitchcock, SE NW Sec. 16-30-1w.
Show of oil 2,785 ft. T.D.

D. J. Wilson et al's No. 1 Clark, 1,320 ft. from W and 25 ft. from S line of NW Sec. 15-35-1w.
S.D. 1,000 ft.

Winkler & Koch et al's No. 1 Belsley, SW SW NW Sec. 2-32-2w.
Rig.

Trego County

Central Commercial's No. 1 Wagg, NW NW SE Sec. 17-13-21w.
C.O. at 1,600 ft.

Hansa & Lauck and Olson Drlg. Co.'s No. 1 Lang, SE SE NW Sec. 1-14-21w.
Topeka lime 3,285 ft.; T.D. 3,314 ft.; set whipstock 2,625 ft.; drlg. 2,800 ft.

Vickers et al's No. 1 Secor, NW NW NW Sec. 25-15-24w.
Rig.

Woodson County

Connell & Marshall's No. 1 Klick, SW NW SW Sec. 20-25-14.
Drlg. 1,090 ft.

GULF COAST WILDCATS

Week Ending July 6

TEXAS

Raccoon Bend—Austin County

Humble O. & R. Co.'s No. 8 Sherrod, 933 ft. E of No. 5, 466 ft. from S line of lease, Wm. C. White Sur.
10¾-in. csg. 1,113 ft.; T.D. 1,119 ft.

Humble O. & R. Co.'s No. 6 McCasland, 933 ft. SE from No. 4-X McCasland, 250 ft. at R/A NE from SW line, Wm. C. White Sur.
Drlg. shale 4,815 ft.

Allen Dome—Brazoria County

Mills Bennett Prod. Co.'s No. 4 Rose Allen, 330 ft. SE of No. 1, 300 ft. E of No. 4 Owens, J. G. Mendal Sur.
T.D. 5,674 ft.; heaving shale; washing
T.D. 5,674 ft.; heaving shale; washing.

Damon Mound—Brazoria County

Intercoastal Oil Co.'s No. 13 Wisdom, 150 ft. from NW line and 10 ft. from SW line of Lot "D," Blk. No. 51.
S.D. 2,600 ft.

Hastings—Brazoria County

Humble O. & R. Co.'s No. 1 E. Lively, 330 ft. from the N line, and in the center of E and W lines of Lot 13, A.C.H.&B. Sur.
Drlg. lime rock 2,649 ft.

Humble O. & R. Co.'s No. 1 J. F. Bridges, center of N 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.
Location.

Humble O. & R. Co.'s No. 2 J. F. Bridges, center of S 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.
Location.

Humble O. & R. Co.'s No. 1 J. C. Johnson, center of 10-ac. lease, A.C.H.&B. Sur. No. 2.
Location.

Stanolind O. & G. Co.'s No. 3 J. W. Surface, 330 ft. S and 455 ft. W of most northerly NE cor. of 75.9-ac. tract, A.C. H.&B. Sur. No. 2.
10¾-in. csg. 2,324 ft.; T.D. 2,346 ft.

Stanolind O. & G. Co.'s No. 3 B. L. Turner, 330 ft. at R/A from NW line and 330 ft. from S line of Turner 195-ac. tract, A.C.H.&B. Sur. No. 1.
16-in. csg. 197 ft.; T.D. 203 ft.

Stanolind O. & G. Co.'s No. 4 Sneed, 330 ft. S, 330 ft. W of NE cor. of Lot 12, D. M. Jay Subd., on Sneed 225-ac. tract, A.C. H.&B. Sur. No. 2.
10¾-in. csg. 2,194 ft.; T.D. 2,205 ft.

Stanolind O. & G. Co.'s No. 2 E. Grote, 466 ft. at R/A from N line and 1,061.6 ft. at R/A from E line of Grote 71.62-ac. tract, A.C.H.&B. Sur. No. 2.
10¾-in. csg. 2,288 ft.; T.D. 2,291 ft.

Stanolind O. & G. Co.'s No. 2 Turner, 285 ft. N, 2,876 ft. W of SE cor. of 195-ac. tract, A.C.H.&B. Sur. No. 1.
Drlg. shale 2,925 ft.

Stanolind O. & G. Co.'s No. 1 Kidd, 285 ft. S of N line, 455 ft. E of W line of 58.4-ac. lease, A.C.H.&B. Sur. No. 2.
Top sand 5,985 ft.; coring sand 5,928 ft.

Stanolind O. & G. Co.'s No. 1 J. C. Hutchinson, 330 ft. S, 330 ft. E of the NW cor. of a 40-ac. tract in the A.C.H.&B. Sur. No. 36.
Cored oil sand 5,830-54 ft.; S.D. 5,924 ft.

Stanolind O. & G. Co.'s No. 3 Sneed, 466 ft. at R/A from W line and 466 ft. at R/A from the N line of a 225-ac. tract, A.C.H.&B. Sur. No. 2.
Top oil sand 6,085 ft.; 7-in. csg. 6,090 ft.; T.D. 6,100 ft.

Stanolind O. & G. Co.'s No. 1 Ford, 330 ft. N of S line of 199.37-ac. tract and 1,725 ft. E of W line of A.C.H.&B. Sur. No. 1.
Top oil sand 6,112 ft.; 7-in. csg. 6,103 ft.; T.D. 6,124 ft.

Stanolind O. & G. Co.'s No. 1 Williams, 466 ft. N, 1,126 ft. from most easterly SW cor. of 81.3-ac. lease, A.C.H.&B. Sur. No. 1.
Drlg. shale 5,810 ft.

Manvel—Brazoria County

Bowles and Barsodi's No. 5 B. E. Norvell Investment Co., 274.5 ft. from S line, 440 ft. from E line of Lot 45, Sec. 23, H.T. &B. Sur.
Location.

T. J. Holcombe's No. 1 A. F. Beddo, 220 ft. from E line, 248 ft. from S line of Blk. 29, H.T.&B. Sur.
Rig up.

Jay Simmons' No. 1 Stitt, located in center of W 5 acres of Lot No. 23, H.T.&B. Sur. No. 23.
T.D. 4,008 ft.; 7-in. csg. 3,990 ft.; drilled to 4,004 ft.; I.P. est. 30 bbls. per day on gas lift.

J. W. Sorrells' No. 1 Swift, Blk. 21, Abst. 318, H. N. Little Sur.
Derrick.

Texas Co.'s No. 12-A Belcher, 770 ft. S, 41 deg. 40 ft. W and 648 ft. S. 47 deg. 59 ft. E from N cor. of lease, H. N. Little Sur.
Derrick.

Texas Co.'s No. 2 Morrison, 330 ft. from E line, 330 ft. S of NW cor. of Lot 32, A.C.H.&B. Sur.
Drlg. shale 2,503 ft.

Texas Co.'s No. 3 Boff, 50 ft. W, 50 ft. S of NE cor. of Lot No. 24, Charles O'Donnell Sur.
Drlg. shale and lime 3,100 ft.

Texas Co.'s No. 8 Ewing, 770 ft. S, 41 deg., 40 ft. W and 648 ft. N, 47 deg., 59 ft. from E cor. of lease, H. N. Little Sur.
T.D. 4,008 ft.; 7-in. csg. 3,984 ft.; comp. for dry gas well; est. 1,000,000 ft. daily.

Texas Co.'s No. 4 F. Leider, 150 ft. S, 42 deg. W from the lease line and 150 ft. S, 48 deg. E from NW line of Lot 3, H. N. Little Sur.
T.D. 3,931 ft.; comp. for gas well; slight spray of S.W.

Texas Co.'s No. 1 O. W. Halligan, center of Lot 27, H.T.&B. Sur. No. 23.
Location.

Texas Co.'s No. 1 O. W. Halligan, center of Lot 26, H.T.&B. Sur. No. 23.
10-in. csg. 1,134 ft.; T.D. 1,146 ft.

Texas Co.'s No. 16 Houston Oil Fields Assn., 247 ft. S, 440 ft. E from NW cor. of Lot 19, A.C.H.&B. Sur. No. 91.
T.D. 1,404 ft.; P.B. to 1,396 ft.

Texas Co.'s No. 2 Dawson, 247 ft. S, 241 ft. W of NE cor. of Lot 58, H.T.&B. Sur. No. 23.
Location.

Trumba Oil Co.'s (J. M. Campbell) No. 1 H. McCauley, 150 ft. each way out of NE cor. of W 5 acres of Lot No. 2, A.C.H.&B. Sur. No. 91.
Location.

Turman Oil Co.'s No. 2 Hart, 40 ft. N, 50 ft. W of No. 1.
Spudded.

Turman Oil Co.'s No. 3 Hart, 150 ft. E of W line, 433 ft. S of N line of Lot 8.
Location.

Uscan Oil Co.'s No. 1 Ebbert, 247.5 ft. from N line, 247.5 ft. from S line of 10-ac. tract, Sec. 23, H.T.&B. Sur.
T.D. 4,035 ft.; tested 6 fourbles of oil; slight show of S.W. on D.S. test from 4,054-85 ft.

Whittle Oil Co.'s No. 1 Duke, 320 ft. W of

E line, center N and S Lot 18, H.T.&B. Sur. No. 23.
10¾-in. csg. 1,130 ft.
Woodbine Oil Co.'s No. 1 A. F. Beddo, midway N and S lines of a 2-ac. lease, Blk. 29, H.T.&B. Sur.
Derrick.

Old Ocean—Brazoria County

Harrison & Abercrombie's No. 2 Bernard River, 1,000 ft. N, 54 deg. W, 400 ft. S. 36 deg. W of No. 1, Charles Breen Sur.
Drlg. shale 6,810 ft.

Port Lavaca—Calhoun County

Empire G. & F. Co.'s No. 1 Hartman, 1,924 ft. from SE line, 497 ft. from NE line of 80-ac. lease, M. Sanches Sur.
T.D. 6,259 ft.; making D.S. test.
Halliburton Oil Prod. Co.'s No. 3 Burton 801 ft. E of No. 1 M. Sanches.
Surveying—location.

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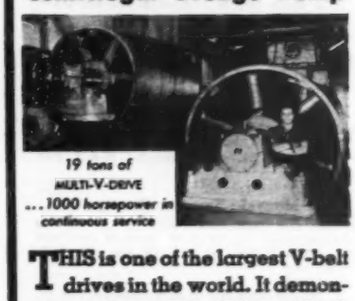

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WORTHINGTON

Halliburton Oil Prod. Co.'s No. 2 Dave Burton, 330 ft. SW along E line of Texas Co.'s Shofner 10-ac. lease and 330 ft. at R/A, M. Sanches Sur.
T.D. 6,238 ft.; 7-in. csg. 6,230 ft.; I.P. 176 bbls. in 24 hrs. through 12/64-in. choke; T.P. 750 lbs.; C.P. 1,200 lbs.
Steinberger Pet. Co.'s No. 2 Shofner, 932 ft. SW of No. 1 Shofner, and 466 ft. from SE line of tract, M. Sanches Sur.
Drlg. shale 783 ft.
Texas Co.'s No. 1 Hackney, 1,504 ft. N of S line and 466 ft. E of W line of B. Rodriques Sur.
T.D. 6,163 ft.; reaming.
Texas Co.'s No. 1 Shofner, SE offset to Steinberger's No. 1 Shofner, M. Sanches Sur.
T.D. 6,260 ft.; 7-in. csg. 6,232 ft.; perforated csg. 6,222-30 ft. with 29 holes; running screen.
Tulane Gordon's No. 1 W. A. Shofner, 339.5 ft. from N line, 295 ft. from E line of block, D. Tilley Addn., M. Sanches Sur.
Location.

Anahuac—Chambers County

Humble Oil & Refg. Co.'s No. 4 Meddleton, 3,085 ft. N of S line, 466 ft. E of W line of Sec. 58, H.&T.C. Survey.
Derrick.
Humble O. & R. Co. and Rycade Oil Co.'s No. 1 Engels, 466 ft. out of SE cor. of Sec. 50, H.&T.C. Sur.
Location.
Humble O. & R. Co.'s No. 2 Broussard, 2,332 ft. E of W line, 2,332 ft. N of S line of Sec. 63, H.&T.C. Sur.
Location.
Humble O. & R. Co.'s No. 3 Broussard, 1,399 ft. out of NW cor. of Sec. 63, H.&T.C. Sur.
Drlg. shale 6,263 ft.
Humble O. & R. Co.'s No. 2 Clark, 2,332 ft. W of E line, 2,332 ft. N of S line of Sec. 57, H.&T.C. Sur.
T.D. 7,095 ft.; 7-in. csg. 7,071 ft.; I.P. 29 bbls. per hr. through ¼-in. choke; C.P. 1,200 lbs.; T.P. 1,125 lbs.

Barbers Hill—Chambers County

Sun Oil Co.'s No. 7 Higgins, 50 ft. S of N line, 50 ft. W of E line.
T.D. 3,831 ft.; 9⅝-in. csg. 3,758 ft.
Sun Oil Co.'s No. 11 Chambers County, half way between and in line with Nos. 9 and 10.
Drlg. shale 4,383 ft.
Texas Gulf Prod. Co.'s No. 25-B Kirby, 75 ft. S of N line of Kirby "B" Lease, S offset to No. 3 Fitzgerald.
Drlg. salt 2,087 ft.
Texas Gulf Prod. Co.'s No. 6 Wilburn, 50 ft. N of S line, 25 ft. E of W line, William Hodges Sur.
Reaming 4,795 ft.
Texas Gulf Prod. Co.'s No. 2 Fitz-Meadows, 281 ft. S of N line, 50 ft. W of E line of T. S. Fitz lot.
T.D. 4,562 ft.; P.B. to 4,040 ft.; I.P. 338 bbls. per day on gas lift.
Yount Lee Oil Co.'s No. 30 Chambers County School Land, 50 ft. N of S line, direct offset to Sun Oil Co.'s No. 11.
Drlg. salt 2,292 ft.

Big Creek—Fort Bend

Trans State Oil Co.'s No. 1 B. J. Wheat, 108 ft. N of S cor. of J. F. Ahlers lease and 38 ft. E at right angles, W. Young Sur.
Rig up.

Boling—Fort Bend County

Sun Oil Co.'s No. 1 H. R. Farmer, 103 ft. from N line, 359.2 ft. from W line of 100-ac. tract, James Scott League Sur.
T.D. 4,089 ft.; 7⅝-in. csg. 4,079 ft.

Orchard—Fort Bend County

Gulf Prod. Co.'s No. 44 Moore, 500 ft. NW of No. 42, Leo Burknapp Sur.
Rig up.
Gulf Prod. Co.'s No. 43 Moore, 350 ft. E along S line of SW cor. of E.M.&G. Co. Sur. and 740 ft. N at R/A to said line of lease, 350 ft. E of No. 3 Moore.
6,652 ft.; 7-in. csg. 6,584 ft.

Thompson—Fort Bend County

Gulf Prod. Co.'s No. 9 Hammerstram, S Kennedy Sur.; 330 ft. N of S line, 4,775 ft. E of W Line.
Rig up.
Humble O. & R. Co.'s No. 2 Gubbels, 500 ft. E of W line, 500 ft. N of S line, 638 ft. W of No. 4-B Gubbels, S. Kennedy Sur.
Drlg. shale 5,710 ft.
Humble O. & R. Co.'s No. 25-A Booth.
Derrick.

High Island—Galveston County

Yount-Lee Oil Co.'s No. 48 Cade, 900 ft. SE and 150 ft. NE of SW corner Block 4, Fitzsimmons Survey.
Derrick.
Yount Lee Oil Co.'s No. 3 Maco-Stewart, 202 ft. S of No. 2 Stewart and 122 ft. W of E line of 7.73 acre tract, D. Dunman Survey.
Derrick.
Yount Lee Oil Co.'s No. 1-C Geo. Smith, D. Dunman Sur.
Drlg. shale and lime 2,729 ft.
Yount Lee Oil Co.'s No. 47 Cade, Fitzsimmons Sur.
Drlg. shale and lime 4,375 ft.
Yount Lee Oil Co.'s No. 2 Lousiafot, 150 ft. due S of No. 1, M. Dunman Sur.
Drlg. sand and shale 3,877 ft.
Yount Lee Oil Co.'s No. 2-A Taylor, 85 ft. W of No. 1, A. Dunman Sur.
Drlg. sand 5,172 ft.
Yount Lee Oil Co.'s No. 46 Cade, 424 ft. SW of No. 35, 424 ft. NW of No. 36, Fitzsimmons Sur.
T.D. 5,562 ft.; 7-in. csg. 5,466 ft.; tested dry gas; to deepen.

Dickinson—Galveston County

Humble Oil & Refg. Co.'s No. 1 Hanson, 502 ft. from N line and 356 ft. from E line of 15.59 acre tract.
Drlg. shale 1,620 ft.
Humble Oil & Refg. Co.'s No. 6 Maco Stewart, 6,087 ft. S of NE corner, 1,390 ft. W of E line and 1,390 ft. E of W line and 466 ft. N of S line of Stewart 863 acre lease, J. Sellers Survey.
Drlg. 340 ft.
Humble O. & R. Co.'s No. 5-A Stewart, 466 ft. W of E line of Stewart "A" Lease, 5,500 ft. due S of No. 2-A Stewart, John Sellers Sur.
Rig up.
Humble O. & R. Co.'s No. 1 Bayou Development Co., 375 ft. S of N line and midway between E and W lines of Lot No. 7, John Sellers Sur.
Rig up.
Humble O. & R. Co.'s No. 2-B Maco Stewart, 400 ft. from N line of Bayou, 610 ft. from No. 1-B, John Sellers Sur.
T.D. 3,063 ft.; 7-in. csg. 3,028 ft.; comp.; no gauge.
Humble O. & R. Co.'s No. 1 E. E. Anderson, 375 ft. N of S line, and midway between E and W lines of Lot No. 4, John Sellers Sur.
Location.
Humble O. & R. Co.'s No. 2-A Maco Stewart, 3,324 ft. S along E line of S bank of Bayou and 566 ft. W of E line at R/A John Sellers Sur.
Coring 9,121 ft.
Stanolind O. & G. Co.'s No. 1 State, 247 varas S of Humble O. & R. Co.'s No. 1 Jones.
Drlg. shale 1,510 ft.

Arriola—Hardin County

Houston Oil Co.'s No. 7-X fee, 660 ft. 20 deg. 30 ft. SE from No. 1-X.
Location.
Houston Oil Co.'s No. 8 fee, Arriola Sur.
T.P. 3,062 ft.; P.B. to 2,618 ft.
Houston Oil Co.'s No. 6-X fee, 400 ft. SE of No. 4-X, 500 ft. SE of No. 5-X fee.
T.D. 5,070 ft.; P.B. to 4,270 ft.
Republic Prod. Co.'s No. 12 fee, 2,599 ft. S of N line, 474 ft. E of W line of E. Arriola Sur.
T.D. 3,721 ft.; 9⅝-in. csg. 3,709 ft.

Batson—Hardin County

Danciger Oil & Refining Co.'s No. 1 Tom Wynne, 250 ft. S, 150 ft. W of Deering's No. 1 Cruse.
T.D. 3,689 ft.; hole heaving in.
John Deering's No. 1 Conzelman, 2,810 ft. E along N line from NW cor. of H. Numm Sur. and 35 ft. at R/A, W. Donaho Sur.
T.D. 5,129 ft.; 7-in. csg. 5,090 ft.; swbng.
John Deering's No. 1 Bullock, 1,000 ft. N, 17 ft. E of middle line of 30-ac. tract, Bullock tract, Dondo Sur.
T.D. 6,294 ft.; hole heaved to 4,944 ft.; S.D.
John Deering's No. 2 Cruse, 200 ft. E and 50 ft. S of No. 1 Cruse, W. Donaho Sur.
Rig up.
Sterling Oil & Refg. Co.'s No. 1 Doucette, 565 ft. N from NE corner of Mann tract, thence 565 ft. at R/A, W. Donoho Survey.
Prepare to work over, T.D. 5,914 ft., sidetracked at 5,680 ft.; T.D. 5,870 ft.; abd.
Shell Pet. Corp.'s No. 1 R. O. Jordan Fee, W. Donoho Survey.
Rig up.

Pierce Junction—Harris County

J. S. Abercrombie's No. 5 John Ritter, 259 ft. SW of No. 4, 1,047 ft. NE along SE line out of SW cor. of 160-ac. tract, thence 93 ft. NW at R/A, Sec. 51, J. Hamilton Sur.
Drlg. shale 3,830 ft.
Gulf Prod. Co.'s No. 11 H. C. Cain, 390 ft. from W line, thence 439 ft. at R/A to N line of 130-ac. tract, Jas. Hamilton Sur. No. 98.
Drlg. shale 5,261 ft.
Gulf Prod. Co.'s No. 40 E. R. Taylor, 89.5 ft. along E line of E. R. Taylor's 560-ac. tract from SW cor., south offset to Hamil & Smith's No. 1 Howe.
Drlg. shale 6,001 ft.
Hamil & Smith's No. 1 C. W. Mowery, 50 ft. out of NE cor. of 600-ac. tract, Sec. 53, J. Hamilton Sur.
Drlg. shale 6,610 ft.
W. H. Holland et al's No. 1, I.&G.N.R.R., 830 ft. from S line of Jas. Hamilton Sur.
Derrick.
Rio Bravo Oil Co.'s No. 28 Settegast, 1,010 ft. W and 450 ft. N from most southerly SE corner of "B" Lease, J. Kopmen Sur.
Derrick.

Humble—Harris County

Sun Oil Co.'s No. 30 Bender, 2,393 ft. N, 3,680 ft. W of most northerly SE cor. of lease; B. Adams Sur.
Rig up.
Sun Oil Co.'s No. 31 River.
Abd. 1,135 ft.
Sun Oil Co.'s No. 20 Bender.
Washing down T.D. 3,821 ft.

Mykawa—Harris County

Alpha Pet. Co.'s No. 1 Waggenhausen, C of E½ Lot 10, F. J. Rothas Sur.
T.D. 4,681 ft.; P.B. 4,554 ft.; swabbing.; 7-in. csg. 4,516 ft.
Danciger O. & R. Co.'s No. 3 Minnetex, 563 ft. due E of No. 1, thence 150 ft. at R/A, Blk. 254, W. H. Lovett Sur.
Drlg. shale 3,810 ft.
Flannigan Drlg. Co.'s No. 1 Minnetex, 150 ft. out of NE cor. of Blk. 261, Wm. Lovett Sur.
Spudded.
West Prod. Co.'s No. 1 Forbes, center of Blk. 15, F. J. Rothas Sur.
Drlg. shale 4,575 ft.
West Prod. Co.'s No. 1 Lee, 200 ft. out of NW cor. of Wm. R. Wilson Sur.
Drlg. shale 4,005 ft.
West Prod. Co.'s No. 1 W. Slang, John R. Hall Sur., Blk. 7.
Drlg. shale 2,930 ft.

Tomball—Harris County

Amerada-Stanolind O. & G. Co.'s No. 2 W. H. Doyle, 357 ft. from E and W lines, 466 ft. from N line of 34-ac. tract, J. House Sur.
Pulled csg. to 3,773 ft., side tracked at 3,773 ft.; drlg. sand 4,331 ft.; T.D. 5,587 ft.
Amerada Pet. Corp.'s No. 3 A. B. Metzler.
T.D. 5,586 ft.; 7-in. csg. 5,577 ft.
Humble O. & R. Co.'s No. 2 Mueller.
Top sand 5,553 ft.; T.D. 5,556 ft.; 7-in. csg. 5,549 ft.; comp.; no gauge.
Humble O. & R. Co.'s No. 3 Gossett, 550 ft. from most northerly SE line, 186 ft. NE from southwesterly SW line, E. Smith Sur.
T.D. 5,562 ft.; comp.; no gauge.
Humble O. & R. Co.'s No. 2 Scherer, 1,872 ft. S of N line, 566 ft. E of W line, 566 ft. W of E line, J. H. Edwards Sur.
T.D. 5,587 ft.; 7-in. csg. at 5,582 ft.; flowed 3 bbls. per hour; killed well; P.B. to 5,542 ft.
Shell Pet. Corp.'s No. 2 Theis, 2,382 ft. N and 292 ft. W of SE cor. of lease, J. House Sur.
10¾-in. csg. 913 ft.; T.D. 919 ft.

Vanderbilt—Jackson County

Phillips Pet. Co.'s No. 2 Tuney, 330 ft. each way out of E cor. of 64-ac. tract, or 414 ft. SE of No. 1, R. Musquiz Sur.
Location.

Big Hill—Jefferson County

Yount Lee Oil Co.'s No. 1-B Pipkin & Davis, 2,225 ft. from E line and 2,385 ft. from N line of survey, Wm. McFadden Sur.
Drlg. sand and lime 4,057 ft.

Fannett—Jefferson County

Gulf Prod. Co.'s No. 5 Junker.
Drlg. shale and lime 5,172 ft.

Cleveland—Liberty County

Black Gold Pet. Oil Corp.'s No. 2 R. D. McDonald, 466 ft. W of most westerly E line and 466 ft. N of most northerly S line of survey, 933 ft. W of Gulf Prod. Co.'s No. 7-C Kirby Lbr. Co., T. Devers Sur.
Derrick.
Gulf Prod. Co.'s No. 2 McDonald, 3,569 ft. W along S line from most easterly SE cor. of survey and 1,286 ft. N at right angles, Charles Smith Sur.
Drlg. sand and shale 5,078 ft.

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Seismograph Surveys

623 Esperson Bldg.

Houston - - Texas

William J. Colegrove et al's No. 1 State School Land & Dev. Co., 446 ft. from W line and 170 ft. from S line of survey, Clayton Harper Sur.
Location.

Esperson—Liberty County

General Crude Oil Co.'s No. 21 Esperson.
T.D. 6,631 ft.; washed over to 3,006 ft.; reaming.
General Crude Oil Co.'s No. 1 W. D. Kay, Malcolm Duncan Sur., 1,537 ft. along N T.D. 9,343 ft.; P.B. to 6,230 ft.; tested S.W.; P.B. to 4,295 ft.; tested S.W.; prepare to abd.
General Crude Oil Co.'s No. 10 Davis, 2,000 ft. from E line, 660 ft. from S line of D. Kokernut Sur.
Drlg. shale and sand 7,763 ft.

Hankamer—Liberty County

Eastman-Ward's No. 1 R. E. Lee, 115 ft. from N line of lease and 76 ft. W of west bank of White Bayou, Geo. Stengler Sur.
Rig up.
Eljean Oil Co.'s No. 2 S. E. Ezzell, 130 ft. from N and S line of 10-ac. lease, Levi Barrow Sur.
Location.
Gulf Prod. Co.'s No. 1-B W. L. Bingle, 159 ft. E along S line of H.&T.C. Sur., thence 378 ft.
Drlg. shale 5,641 ft.
Gulf Prod. Co.'s No. 21 E. W. Boyt, 110 ft. from W line of Amos Allen Sur.
Location.
Gulf Prod. Co.'s No. 22 Boyt, Allen Sur.
T.D. 5,085 ft.; recovered 26 fourbles of oil on D.S. test.
Sterling O. & R. Co.'s No. 1 George Stengler, 100 ft. out of most westerly NE cor. of Geo. Stengler Sur.
Derrick.
Will Strozier et al's No. 1 Ezzell, 700 ft. N of S line, 150 ft. W of E line of Levi Barrow Sur.
Derrick.
Wilson Roach Oil Co.'s No. 2 Marrs-McLean, 513.4 ft. from W line, 100 ft. from E line, Levi Barrow Sur.
T.D. 4,202 ft.; 7-in. csg. 4,178 ft.

Hull—Liberty County

Fondren & Snowden's No. 2 Humble-Hooks, 50 ft. from S line, 300 ft. NW of No. 1, J. Devore Sur.
S.D. 802 ft.
Sterling O. & R. Co.'s No. 2 Taylor, 70 ft. W, 50 ft. N of the NE cor. of Humble-Taylor lease, J. Devore League.
T.D. 3,183 ft., prepare to pump.

Van Vleck—Matagorda County

Skelly Oil Co.'s No. 3 Cobb "B," 2,750 ft. from NW line, 2,900 ft. from SW line of M. Cummins Sur.
T.D. 7,108 ft.; 7-in. csg.; 9⅝-in. at 7,085 ft.; drlg. plug.

Markham—Matagorda County

Hamill & Hamill's No. 2 Kountze.
T.D. 4,675 ft.; top sand 4,673 ft.; prepare to core ahead.

Conroe—Montgomery County

Humble O. & R. Co.'s No. 74-A South Tex. Lbr. Co., 466 ft. from N line, 1,500 ft. from W line of 325-ac. tract, Alex McCowan Sur.
T.D. 5,080 ft.; 7-in. csg. 5,052 ft.; came in for gas well, killed to reset liner at 5,085 ft. T.D.

Splendora—Montgomery County

Bryce McCandless et al's No. 1 Texas Long Leaf Lbr. Co., 330 ft. from N and E lines of the W½ of Blk. No. 8, Walker County School Land Sur.
Derrick.

Orange—Orange County

Trio Oil Co.'s No. 1 D. S. Comier, 69 ft. W of E line and 39 ft. S of N line of 6.83-ac. tract in W. M. Dyson Sur.
S.D. 3,005 ft.

Port Neches—Orange County

Texas Co.'s No. 5-B (second), 897.5 ft. S, 850 ft. W from most westerly NE cor. of "B" Lease.
Rig up.
Texas Co.'s No. 5 Stark, 400 ft. from S and 125 ft. from E line of lease, M. E. Hall Sur.
Derrick.
Texas Co.'s No. 4-B Polk, 750 ft. S and 1,450 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.
Texas Co.'s No. 6-B Polk, 750 ft. S and 250 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

Livingston—Polk County

Gem Oil Co.'s No. 4 Watt, 660 ft. N of No. 3, 330 ft. from W line of lease, A. Viesca Sur.
Location.
Gem Oil Co.'s No. 6 Davis & Holmes, 652 ft. from W and 662 ft. from N line of survey, A. Viesca Sur.
Rig up.
Hawkeye Pet. Co.'s No. 1 L. C. Howard, 365 ft. from E line, 330 ft. from S line of 75-ac. tract, A. Viesca Sur.
Drlg. shale 480 ft.
Hawkeye Pet. Co.'s No. 2 Howard, 365 ft. from E line of lease, 695 ft. N of No. 1, A. Viesca Sur.
Location.
Humble O. & R. Co.'s No. 10 Granbury, 466 ft. NW and 466 ft. SW from S cor. of L. C. Howard 75-ac. tract, A. Viesca Sur.
Drlg. shale 3,572 ft.
Ownby Drlg. Co. No. 3 Pratt, 660 ft. W of No. 2, 330 ft. S of N line, A. Viesca Sur.
Derrick.
Sun Oil Co.'s No. 5 Pratt, 660 ft. W of No. 3, and 330 ft. S of N line of lease, A. Viesca Sur.
Derrick.

San Felipe—Waller County

Buck Oil Co.'s No. 2 Vaughn, 300 ft. S, thence 200 ft. E from Seaport Oil Co.'s No. 1 Vaughn, J. McFarland Sur.
T.D. 3,038 ft.; swabbed dry; prepare to deepen.

Refugio—Refugio County

Houston Oil Co.'s No. 11 Wilson Heard, 330 ft. S of center of N line on 5-ac. lease, Refugio townsite.
Drlg. shale 3,810 ft.

McFaddin-O'Connor Districts—Victoria and Refugio Counties

Texas Co.'s No. 9 McFaddin, 1,850 ft. N, 2 deg., 45 ft. S from No. 2.
7-in. csg. 6,196 ft.; T.D. 6,276 ft.; P.B. to 4,448 ft.; swbng., showing S.W.

Clay Creek—Washington County

Sun Oil Co.'s No. 14 Janner.
Drlg. plug; T.D. 1,318 ft.

Louise—Wharton County

Pure Oil Co.'s No. 4 Kountze, 990 ft. NE. 990 ft. SE of W corner of 240-ac. tract, Morris & Cummings Sur.
Derrick.
Pure Oil Co.'s No. 1 J. H. Roberts, 990 ft. SW and 660 ft. SE of N cor. of 80-ac. tract, Morris & Cummings Sur.
Derrick.
Pure Oil Co.'s No. 2 Weever, 1,980 ft. SW, 990 ft. NW of E cor. of Sec. 22, J. M. Brownson Sur.
Derrick.
Pure Oil Co.'s No. 2 Wharton, 400 ft. NW and 450 ft. NE from the most westerly cor. of Sec. 26, F. Walnut Sur.
T.D. 5,167 ft.; prepare to make D.S. test.
Pure Oil Co.'s No. 2 McIntyre, 485 ft. NE, 880 ft. SE from most NE cor. of 317.22-ac. lease, Morris & Cummings Sur.
T.D. 5,147 ft.; 7-in. csg. 5,087 ft.
Shell Pet. Corp.'s No. 1 A. and E. Steves, 1,400 ft. E and 1,200 ft. S of NW cor. of 1,279.4-ac. lease, J. J. Dillard Sur.
Drlg. shale and shells 3,125 ft.

Bayou St. Dennis—Terrebonne Parish

Texas Co.'s No. 1 Riggolets, 150 ft. W and 230 ft. S of NE cor. Sec. 30-17-24.
Drlg. shale 1,350 ft.
Texas Co.'s No. 2 Bayou St. Dennis, 466 ft. N and 1,194 ft. W of SE cor. of Sec. 19-17-24.
Drlg. sand 1,213 ft.

LOUISIANA

Bay St. Elaine—Terrebonne Parish

Texas Co.'s No. 3 School Board, Sec. 16-22s-18e.
Location.
Texas Co.'s No. 10 State, 4,550 ft. E and 4,595 ft. S of NW cor. of Sec. 17-22s-18e.
Drlg. wtr. sand 3,325 ft.

Calliou Island—Terrebonne Parish

Texas Co.'s No. 21 Calliou Island.
Drlg. sand 2,000 ft.
Texas Co.'s No. 23 Calliou Island.
T.D. 4,064 ft.; I.P. 1,200 bbls. per day.

SOUTH LOUISIANA FIELDS

Black Bayou—Cameron Parish

Shell Pet. Corp.'s No. 23 Watkins, 1,683 ft. E, 1,825 ft. S of NW cor. Sec. 17-12-12.
Drlg. shale 1,316 ft.
Shell Pet. Corp.'s No. 24 Watkins, 2,832 ft. W, 695 ft. S of NW cor. Sec. 18-12-12.
Rig up.
Shell Pet. Corp.'s No. 22 Watkins, 2,230 ft. W and 1,340 ft. S of NE cor. Sec. 18-12s-12w.
Drlg. shale 4,100 ft.
Shell Pet. Corp.'s No. 21 Watkins, 1,570 ft. E of NW cor. Sec. 17-12s-13w.
Cmtd. csg. 4,099 ft.; I.P. 622 bbls. per day.
Shell Pet. Corp.'s No. 3 State.
T.D. 6,157 ft.; P.B. to 5,864 ft.; milling on csg. at 5,169 ft.

Bosco—Acadia and St. Landry Parishes

Superior Oil Prod. Co.'s No. 3 Kahn, 2,603 ft. N and 300 ft. W of SE corner of Sec. 33-8s-3e.
Drlg. shale 7,852 ft.
Superior Oil Prod. Co.'s No. 2 Altmond, 3,390 ft. S, 512 ft. W from NE cor. of Sec. 33-8s-3e.
Drlg. sand and shale 7,996 ft.
Superior Oil Prod. Co.'s No. 10 Hernandez, 2,125 ft. N, 1,155 ft. W from SE cor. of NW¼ Sec. 34-8s-3e.
Drlg. shale 7,621 ft.
Superior Oil Prod. Co.'s No. 5 Iseringhausen, 2,662 ft. S, 686 ft. E out of NW cor. of Sec. 35-8s-3e.
Drlg. sand and shale 8,188 ft.
Superior Oil Prod. Co.'s No. 6 Larcade, 451 ft. N, 2,053 ft. E of SW cor. Sec. 26-8s-3e.
T.D. 8,682 ft.; 7-in. csg. 8,667 ft.; comp.; no gauge.
Superior Oil & Prod. Co.'s No. 1 E. Arceneaux, 2,027 ft. E of NW cor., 4,583 ft. S of Sec. 35-8s-3e.
7-in. csg. 8,653 ft.; T.D. 8,670 ft.; tested S.W.; trace of oil.
Superior Oil & Prod. Co.'s No. 1 M. Benoit, 1,165 ft. W of SE cor., 2,320 ft. N, Sec. 34-8s-3e.
T.D. 8,879 ft.; P.B.
Superior Oil Prod. Co.'s No. 2 Domingua, 3,194 ft. N, 1,150 ft. N of SE cor. Sec. 34-8s-3e.
T.D. 8,610 ft.; 7-in. csg. 8,590 ft.; I.P. 226 bbls. in 18 hrs. through 9/64-in. choke; T.P. 825 lbs.; C.P. 1,150 lbs.
Superior Oil & Prod. Co.'s No. 8 Hernandez, 105 ft. E, 219 ft. N of SW cor. of NW¼ Sec. 34-8s-3e.
T.D. 8,631 ft.; P.B. to 7,775 ft. and reamed to 7,840 ft.; lost drill collar in hole; fishing.
Superior Oil Prod. Co.'s No. 2 Le Blanc, 1,698 ft. S, 937.09 ft. W of NE cor. Sec. 33-8s-3e.
T.D. 8,373 ft.; sidetracked at 7,000 ft.

Ascension Parish

Humble O. & R. Co.'s No. 4 Community, 4,825 ft. from NE cor. and 283 ft. S of N line at R/A, Sec. 33-10s-2w.
Digging cellar.

Cameron Meadows—Cameron Parish

Magnolia Pet. Co.'s No. 12 Cameron Meadows, 423 ft. E of No. 11.
Drlg. shale 3,050 ft.
Burton Sutton Oil Co.'s No. 7 School land.
Drlg. gravel 330 ft.
Burton-Sutton Oil Co.'s No. 4 School Land, 2,891 ft. W and 150 ft. N of SE cor. of Sec. 16-4s-13w.
Derrick.

Choctaw Dome—Iberville Parish

Standard Oil Co.'s No. 1 Myrtle, 900 ft. N and 550 ft. W of SE cor. of SW¼ of Sec. 52-9s-11e.
Rig up.

Dog Lake—Terrebonne Parish

Texas Co.'s No. 11 State, 1,100 ft. N, 2,476 ft. W of SE cor. of Sec. 21-21s-16e.
S.D. 2,014 ft.

Four Isle—Terrebonne Parish

Texas Co.'s No. 8 La. Land & Expl. Co., 2,177 ft. E, 1,385 ft. S of NW cor. Sec. 24-21s-16e.
Rig up.
Texas Co.'s No. 5 State, 885 ft. S, 2,327 ft. E of NW cor. of Sec. 24-21s-16e.
Location.

Garden Island Bay—Plaquemines Parish

Texas Co.'s No. 16 Garden Island.
Drlg. shale 1,758 ft.
Texas Co.'s No. 13 State, 3,391 ft. S and 1,604 ft. W of NE cor. Sec. 107-23-32.
Rig up.

Gueydan—Vermillion Parish

Pure Oil Co.'s No. 6, Alliance Trust, 667 ft. E, 1,787 ft. S line of lease, Sec. 34-11s-1w.
T.D. 9,548 ft.; prepare to core.

Hackberry—Cameron Parish

Gulf Prod. Co.'s No. 18 Erwin, 271 ft. W and 722 ft. N of SE cor. of Sec. 12-12s-10w.
T.D. 6,910 ft.; prepare to drill deeper.

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and

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Effective Fire Protection For The Oil Industry

Texas Co.'s No. 14 State, 500 ft. SE of No. 13, Sec. 13-12s-10w.
Drlg. shale 4,312 ft.
Texas Co.'s No. 15 State, Sec. 13-12s-10w.
T.D. 6,826 ft.; flowing oil.
Yount Lee Oil Co.'s No. 13 Gulf Land, Sec. 14-12s-10w.
Drlg. shale 5,373 ft.
Yount Lee Oil Co.'s No. 1-A Gulf Land, 2,000 ft. S and 50 ft. E of the NW cor. of Sec. 22-12-10.
Rig up.

New Iberia—Iberia Parish

Hellis' No. 1 Sabatoir, 900 ft. N and 1,210 ft. E of SE cor. of Sec. 53-12s-7e.
Drlg. salt 3,210 ft.
Iberia Oil Corp. and Y. D. Spell's No. 2 Bernard, 150 ft. E of No. 1, Sec. 54-12s-7e.
S.D. 3,846 ft.; salt.

Iowa—Calcasieu and Jeff Davis Parish

Shell Pet. Corp.'s No. 17 Heyd.
S.D. 4,574 ft.
Shell Pet. Corp.'s No. 16 Heyd, 990 ft. S, 998 ft. W of NE cor. Sec. 13-9s-7w.
T.D. 6,884 ft.; drlg. plug.
Shell Pet. Corp.'s No. 4 Tuten, 330 ft. S, 1,819 ft. W of NE cor. SE¼ Sec. 13-9s-7.
T.D. 6,698 ft.; P.B. to 6,659 ft.

Jennings—Acadia Parish

Port City Oil Co.'s No. 15 Jennings-Haywood, 108 ft. E, 368 ft. S of NW cor. Sec. 41-9s-2w.
T.D. 1,845 ft.; I.P. 130 bbls. per day; pumping.
Yount Lee Oil Co.'s No. 15 Houssiere-Latriele.
Drlg. gumbo 825 ft.

Lake Barre—Terrebonne Parish

Texas Co.'s No. 35 Lake Barre.
Drlg. shale 1,710 ft.
Texas Co.'s No. 36 Lake Barre.
T.D. 3,788 ft.; W.O.C.
Texas Co.'s No. 14 Lake Barre.
P.B. to 3,017 ft.; set whipstock; T.D. 3,532 ft.; abd.
Texas Co.'s No. 15 Lake Barre.
Abd. 4,024 ft.

Leesville—LaFourche Parish

Gulf Prod. Co.'s No. 6 Allen Lane, Sec. 26-21s-22e.
T.D. 2,650 ft.
Texas Co.'s No. 23 Leesville, 975 ft. S, 1,975 ft. W of NW cor. of SW¼ Sec. 26-21-22.
Location.
Texas Co.'s No. 24 La. Land & Exploration Co.
T.D. 3,335 ft.; I.P. 1,476 bbls. per day on ¼-in. choke.
Texas Co.'s No. 32 Leesville, 890 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-21s-22e.
Rig up.
Texas Co.'s No. 33 Leesville, 1,590 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-1s-22e.
Rig up.
Texas Co.'s No. 36 Leesville, 476 ft. E, 385 ft. E of NW cor. SW¼ Sec. 26-21s-22e.
Rig up.
Texas Co.'s No. 37 Leesville, 1,266 ft. N, 102 ft. W of SE cor. NE¼ Sec. 27-21s-22e.
Rig up.
Texas Co.'s No. 27 Leesville.
T.D. 4,567 ft.

Lockport—Calcasieu Parish

Union Sulphur Co.'s No. 6 Moss, located between No. 2 and No. 5 (W.O.).
Drlg. shale 6,656 ft.

Port Barre—St. Landry Parish

Port Barre Oil Co.'s No. 2 Sybil, 2,080 ft. N easterly along section line, thence 55 ft. at R/A to the east. Sec. 29-6s-5e.
Cmtd. csg.; T.D. 2,676 ft.

Roanoke—Jefferson Davis Parish

Classel et al's No. 1 La. Irrigation Mill Co., 695.5 ft. E and 475 ft. N of SW cor. Sec. 1-9s-4w.
Rig up.
Humble Oil & Refg. Co.'s No. 4 Devilbiss, 440 ft. S of N line and 440 ft. W of E line of Sec. 16-9s-4w.
Drlg. shale 1,310 ft.
Humble O. & R. Co.'s No. 1 Clayton, 2,223 ft. from S line, 440 ft. from E line, Sec. 16-9s-4w.
Drlg. shale 6,910 ft.
Humble O. & R. Co.'s No. 2 C. N. Taylor, 1,320 ft. E, 440 ft. S of NW cor. of SW¼ Sec. 12-9s-4w.
Rig up.
Humble O. & R. Co.'s No. 1 Nelson Thomas, 880 ft. W of No. 2 Kratzer, 440 ft. N and W of SE cor. of 200-ac. tract.
T.D. 9,622 ft.; W.O.C.
Shell Pet. Corp.'s No. 1 Jarnigan, 330 ft. E, 660 ft. S, NW cor. Sec. 12-9s-4w.
Coring sandy shale 10,015 ft.; no show.
Shell Pet. Corp.'s No. 1-B Kratzer, 660 ft. N, 330 ft. E of SW cor. of SW¼ Sec. 1-9s-4w.
S.D. 8,828 ft.
Shell Pet. Corp.'s No. 4 Kratzer.
Drlg. plug 9,821 ft.; I.P. 240 bbls. of oil per day on 8/64-in. choke; showing 45% wtr.

Sweet Lake—Calcasieu Parish

Pure Oil Co.'s No. 12 Gulf Land, 800 ft. S, 66 deg. 42 ft. E of No. 12, Sec. 13-13-13.
Location.

Sulphur—Calcasieu Parish

Union Sulphur Co.'s No. 808 fee.
Drlg. sand and shale 3,329 ft.
Union Sulphur Co.'s No. 812 fee.
Drlg. hard sand 2,107 ft.
Union Sulphur Co.'s No. 811 fee.
Drlg. rock 2,989 ft.

White Castle—Iberville Parish

Shell Pet. Corp.'s No. 8 Wilbert.
Drlg. shale 5,094 ft.
Shell Pet. Corp.'s No. 1 White Castle Shingle Co., 1,930 ft. W, 100 ft. S from NE cor. of lease.
Coring shale 5,085 ft.
Shell Pet. Corp.'s No. 1 Adams, 2,340 ft. N, 100 ft. E of SW cor. of lease.
Coring sandy shale 8,873 ft.

Miscellaneous Wildcats

TEXAS

Austin County

Deering & Kayser's No. 1 P. A. McClinton, 1,100 ft. from NW line and C NE and SW of 115-ac. tract in Thomas Bell Sur.
Drlg. 2,312 ft.
Paul English et al's No. 1 Felix Guhn, 1,000 ft. S, 360 ft. E from NW cor. of 71-ac. tract, D. Chomel Sur., 1 mile SE of Kinney.
Rig up.

Brazoria County

Amerada Pet. Corp.'s No. 2 Houston Farms Dev. Co., 2,150 ft. SE, 5,800 ft. SW of N cor. of B.B.B.&C. Sur., in the Perry & Austin Sur.
S.D. 4,450 ft.
George Strake's No. 2 Truska, 991 ft. W of No. 1, H.T.&B. Sur., Sec. 7.
S.D. 6,000 ft.
Showers & Moncrief's No. 1 Hughey, 5,500 ft. NW of discovery well, in center of Lot 18, H.T.&B. Sur., Sec. 29, Abst. 292.
Location.
Texas Co.'s No. 1 Freeport Sulphur Co., 2,764 ft. N, 1 deg., 40 ft. W and 1,134 ft. S, 88 deg., 20 ft. W of NW cor. of S. F. Austin Sur., Abst. No. 35, being in the Conception Arcola Sur.
T.D. 4,544 ft.; P.B. to 3,969 ft.; prepare to perforate csg. and set screen.
Quintana Pet. Co.'s No. 1-B G. L. Wood, 2,778 ft. from W line and 5,555 ft. from S line of 1,483-ac. lease, Thomas Alsbury Sur.
Drlg. shale 4,179 ft.

Calhoun County

Continental Oil Co.'s No. 2 American National Realty Co., 660 ft. from NW line, 660 ft. from NE line of Sec. 6, Blk. C, Pedro Garcia Sur.
S.D. 6,522 ft.

Chambers County

R. A. Mason et al's No. 1 R. M. White, 3,125 ft. N of S line, 466 ft. W of E line of James McGahey Sur.
Drlg. shale 5,620 ft.

Colorado County

Clyde Creighton et al's No. 1 Witte, 150 ft. S and E of most westerly NW cor. of H. White Sur.
10-in. csg. 341 ft.; T.D. 352 ft.
Coyle & Concord's No. 1 fee, 550 ft. from N line, 1,950 ft. from E line of Sec. 45, I.&G.N. Sur.
10¾-in. csg. 610 ft.; T.D. 698 ft.
Trans. State Oil Co.'s No. 1 Frank Weinkuhn, 150 ft. E of W line, 150 ft. S of N line of 150-ac. tract, F. A. Zimmershield Sur.
Drlg. shale 1,568 ft.

Fayette County

Lewis Franklin's No. 1 V. Dybala, center of 75-ac. lease, A. Thompson Sur.
Location.

Fort Bend County

C. B. Bunte's No. 1 Winston, 1,495 ft. E of W line, 2,281 ft. N of S line of 350.6-ac. tract, S. Isaacs Sur.
Location.
W. A. Shafer et al's No. 1 V. B. Bortash, 693 ft. SW of NE line and 1,003 ft. NW of SE line of Sec. 52, H.&T.C. Sur.
S.D. 2,900 ft.
George White et al's No. 1 M. M. Cravins, 1,000 ft. from N, 300 ft. W of SW cor. of survey, B.B.B.&C. Sur. No. 8.
Rig up.

Galveston County

Coast Pet. Co.'s No. 1 Stewart, 3,416 ft. S, 200 ft. E of NW cor. of 142-ac. tract, W. K. Wilson Sur.
T.D. 8,016 ft.; fishing for stuck drill stem.

Grimes County

Dillinger & Hammer's No. 1 L. P. Lane, 150 ft. S of N line and 150 ft. W of E line of 65-ac. tract, B. P. Stewart Sur.
Derrick.
Hubert Holt et al's No. 1 Simon Fuqua, 1,300 ft. N of S line and 400 ft. W of E line of 177-ac. lease and survey, Moses Evans Sur.
S.D. 2,980 ft.
Dr. Marshall et al's No. 1-B Todd, 300 ft. from E line and 175 ft. from N line of 150-ac. tract in extreme NW cor. of county (25 ft. N of No. 1).
S.D. 2,786 ft.
Patton et al's No. 1 Yeager, 1,000 ft. W of E line, 170 ft. S of N line of 53-ac. tract and survey, A. Ruscello Sur., NW of Iola Sur.
S.D. 1,000 ft.

Harris County

Graham & Gardner's No. 1 Hager, 150 ft. out of SE cor. of 736.8-ac. tract, J. W. Clepton Sur.
Drlg. shale 3,820 ft.
Herbert-Still & Hooper's No. 1 Racker, 990 ft. E of W line, 4,290 ft. N of S line of J. C. Ogburn Sur.
T.D. 6,418 ft.; showed 1,200 ft. of S.W. on D.S. tests.
C. C. Foster et al's No. 1 H. K. Johnson, 2,000 ft. from S line and C of E and W lines of G.C.&S.F. Sur.
Drilled 25 ft. and S.D.
Stanolind Oil & Gas Co.'s No. 1 F. J. Burkey, C of Lot 15, Blk. 105, H.T.&B. Sur. No. 5.
Location.
Stanolind Oil & Gas Co.'s No. 1 C. F. Gibson, C of Lot 9, Blk. 41, H.T.&B. Sur. No. 5.
Location.
Stanolind Oil & Gas Co.'s No. 1 J. W. Horlow, C of Lot 10, Blk. 82, H.T.&B. Sur. No. 5.
Location.
Stanolind Oil & Gas Co.'s No. 1 Ed Wells, C of Lot 3, Blk. 16, H.T.&B. Sur. No. 5.
Location.
Stanolind O. & G. Co.'s No. 1 fee land, 330 ft. S, 300 ft. E of NW cor. of 20-ac. tract Sur., Sec. No. 5.
T.D. 5,000 ft.; 9⅝-in. csg. 4,831 ft.; tested S.W.; P.B. 4,685 ft.; flowed 166 bbls. of oil in 24 hrs. through 3/16-in. choke; T.P. 600 lbs.
Stanolind O. & G. Co.'s No. 1 First Natl. Bank of Houston, 950 ft. from NE line, 990 ft. from SE line of 119.6-ac. tract, Callahan and Vance Sur.
Location.
E. E. Young, tr.'s No. 2 P. S. Griffith, 3,476 ft. S of N line, 2,030 ft. E of W line of A. R. Bodman Sur.
S.D. 800 ft.

Jackson County

A. M. Harris' No. 1 Whitley, 800 ft. out of SE cor. of F. G. Keller Sur.
Location.
Shell Pet. Corp.'s No. 1 Combs, 466 ft. EW line, 2,500 ft. NE line of 242.75-ac. tract, M.&C. Sur., Sec. 33.
Location.

Jasper County

Marathon Oil Co.'s No. 1 Jasper County Lumber Co., 330 ft. out of NE cor. of 176.5-ac. tract 5 miles SE of Jasper, T. C. Holmes Sur.
Rig up.

Jefferson County

Humble O. & R. Co.'s No. 1 J. T. White, 330 ft. out of SW cor. of T.&N.O.R.R. Sur. No. 376.
Location.
Sun Oil Co.'s No. 1 Hebert & Braussard, 6,890 ft. NW along SW line and 660 ft. NE at right angles to SW line, B. Blackman Sur., Abst. No. 2.
Drlg. sand 4,257 ft.

Liberty County

R. M. Bruner et al's No. 1 N. Bell, 150 ft. from N line and 150 ft. from W line of Bell's 187-ac. tract, H.&T.B. Sur. No. 4.
Rigging up.
Extension Oil Co.'s No. 1 J. A. Lovett, 330 ft. from E and 600 ft. from S line of lease, P. P. Deevers Sur.
S.D. 4,048 ft.
J. W. Frazier et al's No. 2 Lynott & Buffum, 466 ft. from N and E lines of 60-ac. tract in extreme SE part of survey, James Robeson Sur.
T.D. 7,851 ft.; P.B. 7,550 ft.; prepare to sidetrack.
D. H. Furse's No. 1 J. F. Kover, 300 ft. out of SW cor. of 100-ac. tract, J. R. Mayhon Sur.
Location.
Liberty-Independent Oil Co.'s No. 1 J. M. Neal, 3,550 varas from E line and 505 varas from N line of Samuel Strong Sur.
Shut down.
A. L. Maxwell's No. 1 M. P. Hinchliff, 200 ft. from E line and 1,000 ft. from the N line of survey, H.&T.C. Sur., Sec. 10a.
T.D. 5,486 ft.; D.S. stuck; fishing.
Thomas et al's No. 1-A Eicke, 660 ft. from W line and 2,350 ft. from S line of tract in Green Sur.
T.D. 5,047 ft.; 6⅝-in. csg. at 5,029 ft.
Turnbull & Irwin's No. 1 Cox, 1,000 ft. from the E line and 200 ft. from S line of 108.2-ac. lease, F. J. G. Smiley Sur.
Location.

Matagorda County

Continental Oil Co.'s No. 1 Feife, J. S. Criswell Sur., 3,000 ft. E of W line, 2,800 ft. N of S line of survey.
T.D. 6,026 ft.; running production csg.
Dr. Griffith's No. 1 fee, 3,000 ft. from E line and 3,000 ft. from W line of Wm. H. Bell Sur.
Rig up and S.D.
Helmerich & Payne's No. 1 Hawkins, 850 ft. S. 70 deg. W of Cockburn Oil Co.'s No. 6 Hawkins.
Drlg. shale 4,660 ft.
Horace M. Smith, Inc.'s No. 1 Wadsworth ranch, 150 ft. out of S cor. of Lot No. 8, S. R. Fisher Sur.
T.D. 5,418 ft.; 7-in. csg. 5,376 ft.; standing, showing small amount of gas.

Montgomery County

Travis Baker et al's No. 1 Foster Estate, 1,200 ft. E of W line and 700 ft. S of N line of Blk. No. 56, J. M. De La Garza Sur.
Derrick.
E. E. Bayland's No. 1 C. S. Atkinson, 220 ft. E of T.&B.B. R.R., and 650 ft. S of N line of Robbins George Sur. on 207-ac. tract N of Pinehurst.
Drlg. shale 1,630 ft.
Charles B. Gohison's No. 1 Aaron Parks, 250 ft. from S line, 200 ft. from E line of Parks 139-ac. tract, J. Lindley Sur.
7-in. csg. cmtd. at 3,721 ft.; T.D. 3,773 ft.; shut in; rig moved off.
Paul Sanderson, trustee's No. 1 Texas Long Leaf Lbr. Co., 3,500 ft. W, 1,750 ft. S of NW cor., Wm. Barker Sur.
Drlg. shale 3,230 ft.

Orange County

Blue Line Oil Co.'s No. 1 Godwin, Richard Ballew Sur., 300 ft. from E line and 180 ft. from NE line of Godwin 20-ac. tract.
S.D. 2,770 ft.
Ellis Oil Co.'s No. 1 G. W. Pell, 100 ft. from N and 300 ft. from W line of Pell tract in the J. M. Henerie Sur.
T.D. 3,055 ft.
Dick Schwab's No. 1 East Texas Canal Co., 330 ft. from the N and W lines of 234-ac. tract, John Jett Sur.
Drlg. shale 6,603 ft.

Polk County

Howard Daily et al's No. 1 Z. B. Knox, 1,450 ft. W and 1,920 ft. S of NE cor. of F. Chairs Sur., 16 miles NE of Corrigan.
S.D. 60 ft.
J. F. Anderson's No. 1 E. L. Duke (O.W. D.D.), 400 ft. from E and 350 ft. from S of SW cor. of P. Michelick 50-ac. lease, Abst. 59, P. J. Mineral Sur.
Waiting on a new mud pump; T.D. 5,304 ft.
J. W. Leggett et al's No. 1 Bergman, C of 294-ac. tract, or 1,100 ft. W of H.E.&W.T. R.R., J. T. Pinkney Sur.
Rig up.
Dick Schwab's No. 1 Lynch, 330 ft. out of NW cor. of 200-ac. tract in the George Jameson Sur.
Location.

Refugio County

Cecil Hagen et al's No. 1 Edith Clarkson, 1,736 ft. from N line, 3,820 ft. from E line of J. Coughlin Sur.
Location.

Robertson County

H. L. Patton's No. 1 H. Ely, located on a 616-ac. tract, A. Manchola Sur.
S.D. 3,820 ft.

San Jacinto County

Turnbull & Irwin's No. 1 K. Moore, 5,400 ft. from W line, 1,250 ft. from S line of lease, T. F. De Rumayor Sur.
Abnd. 4,873 ft.
Ralph Sturam et al's No. 1 R. B. Love et al, 475 ft. S of N line and 2,000 ft. W of E line of 177-ac. tract, Drury McGee Sur.
Moving in rig.

Trinity County

Gulf Prod. Co.'s No. 3 Trinity County Lbr. Co., 5,772 ft. N along W line of A. E. Westall Sur. A-48 from NW cor. of H. S. and N. G. McGee 165.9-ac. tract, and being the most northerly SW cor. of Trinity County Lbr. Co.'s 2,697-ac. tract and 387 ft. E at R/A to said line.
Drlg. shale 2,230 ft.

Victoria County

Eastern States Pet. Co.'s No. 1 Henderson & Pickering, 330 ft. out of NW cor. of Lot 19, Wm. Rupley Sur.
S.D. 6,041 ft.
Costa Oil Co.'s No. 1 Schovjasa, 330 ft. out of N cor. of Lot No. 14, Wm. Rupley Sur.
T.D. 4,790 ft.; P.B. to 4,775 ft., perforated 7-in. csg. from 4,760-72 ft.; testing.
Eastern States Pet. Co.'s No. 1 Williams, 330 ft. out of S cor. of 120-ac. tract, E. Benavides Sur.
Rig up.
L. A. Gillespie and Superior Oil & Gas Co.'s No. 1 R. W. Brandt, 330 ft. from NE line, 330 ft. from NW line of tract No. 11, Henderson & Pickering Subd., Wm. Rupley Sur.
T.D. 6,255 ft.; wtr.; P.B. to 4,031 ft.; set whipstock at 4,030 ft.
L. A. Gillespie and Superior Oil & Gas Co.'s No. 1 John Janis, 330 ft. from SW line of survey and on the SE line of Nancy Dean Sur.
Top oil sand 4,746 ft.; T.D. 4,756 ft.; 7-in. csg. 4,737 ft.; I.P. 201 bbls. per day on ¼-in. choke; T.P. 240 lbs.; C.P. 825 lbs.
Magnolia Pet. Co.'s No. 1 Henderson & Pickering, E offset to discovery well, Wm. Rupley Sur.
Drlg. shale 6,390 ft.
Martex Oil Co.'s No. 1 Mitchell, 330 ft. S of W line and 330 ft. N of W line of 500-ac. tract, E. Benavides Sur.
Drlg. shale 5,030 ft.
E. L. Smith Oil Co.'s No. 1 Henderson & Pickering, 330 ft. out of SE cor. of Lot 75, J. M. Bronson Sur.
T.D. 4,806 ft.; P.B. 4,770 ft.; 7-in. csg. 4,771 ft.; I.P. 160 bbls. per day through 3/16-in. choke; T.P. 160 lbs.; C.P. 385 lbs.

Waller County

Diadem Oil Co.'s No. 1 Urban Estate, 1,100 ft. from the N line, 800 ft. from W line of survey.
Abnd. 4,905 ft.

Washington County

Powers Prod. Co.'s No. 1 Boenker, 550 ft. S, 250 ft. W from NW cor. of Dodson 160 acres, J. Newman Sur.
Abd. 1,777 ft.

Wharton County

Texas Co.'s No. 2 Pierce Estate, 3,425 ft. S, 31 degrees 20 ft. E, 4,400 ft. N, 58 deg. 40 ft. E from W cor. of Pierce Estate Land, L&G.N.R.R. Sur. No. 39.
T.D. 4,710 ft.; 7-in. csg. 4,710 ft.

SOUTH LOUISIANA

Acadia Parish

Continental Oil Co.'s No. 1 T. Ortego, 990 ft. S, 500 ft. E of NW cor. SW¼ Sec. 28-7s-2w.
9⅝-in. csg. at 6,303 ft.; drlg. shale 7,190 ft.

Humble O. & R. Co.'s No. 1 American Rice Mills, 660 ft. S and 1,320 ft. W from NE cor. Sec. 27-10s-1e.
Shot off at 6,500 ft.; P.B. 5,720 ft.; perforated csg. from 5,654-5,720 ft.; recovered 65 bbls. of fluid, 20 per cent oil, 80 per cent water.

Avoyelles Parish

Southern State Pet. Co.'s No. 1 Boyette, 330 ft. N and 330 ft. E of SW cor. Sec. 28-3n-5e.
S.D. 3,887 ft..

Beauregard Parish

Chew & Kirby's No. 1 Long Bell Lbr. Co., 330 ft. S and W of C of NE¼ Sec. 26-2s-8w.
Abd. 5,903 ft.

Richardson & Martin's No. 1 Southwest Lbr. Co.
Location.

Calcasieu Parish

Fred Oil Co.'s No. 2 Faist, 262 ft. E and 83 ft. S of NW cor. SE¼ Sec. 26-8s-10w.
Drlg. shale 3,575 ft.

Fohs Oil Co.'s No. 1 Airhart, 275 ft. W and S of NE cor. SW¼ SE¼ Sec. 14-9s-8w.
Drlg. shale 5,741 ft.

Fohs Oil Co.'s No. 1 Wasey, 275 ft. each way out of the NE cor. SW¼ of SE¼ Sec. 12-19s-8w.
T.D. 7,065 ft.; oil sand; prepare to run csg.

Nicholas McCaleb's No. 1 Grey, 2,200 ft. S, 1,200 ft. E of NW cor. Sec. 22-8s-13w.
Drlg. 1,250 ft.

Texas Co.'s No. 4 Nickerson, 2,063 ft. N, and 4,473 ft. W of SE corner Sec. 12-8s-13w.
Drlg. shale 6,702 ft.

Texas Co.'s No. 5 Nickerson, 2,826 ft. N, 3,192 ft. W of SE cor. of Sec. 12-19s-8w.
Derrick.

Texas Co.'s No. 6 Nickerson, 287 ft. N, 289 ft. W of SE cor. of NW¼ Sec. 12-19s-8w.
Location.

Union Sulphur Co.'s No. 3 Castle, 1,350 ft. W, 150 ft. N of SE cor. of NW¼ Sec. 14-9s-8w.
Rig up.

Union Sulphur Co.'s No. 3 Mayo-Reeves, 1,064 ft. S and 1,041 ft. E of NW cor. of Sec. 12-9-8.
Drlg. sand and shale 6,711 ft.

Union Sulphur Co.'s No. 3 Powell, 2,382 ft. S, 2,901 ft. E of NW cor. Sec. 12-9s-8w.
Location.

Union Sulphur Co.'s No. 11 State, 2,137 ft. S, 1,539 ft. E of NW corner of Sec. 12-9s-8w.
Drlg. gumbo 1,359 ft.

Union Sulphur Co.'s No. 2 Mayo Reeves.
P.B. to 5,280 ft.

Union Sulphur Co.'s No. 7 State, 1,316 ft. N and 199 ft. E of the SW cor. of Sec. 12-9s-8w.
Location.

Union Sulphur Co.'s No. 9 State, NW offset to Texas Co.'s No. 2 Nickerson.
T.D. 6,750 ft.; oil sand; prepare to set csg.

Union Sulphur Co.'s No. 1 Castle, 326 ft. N and E of NW Sec. 13-9s-8w.
Abd. 6,473 ft.

Union Sulphur Co.'s No. 2 Powell, 1,279 ft. S, 1,621 ft. E of NW cor. Sec. 12-9s-8w.
Drlg. shale and lime 6,660 ft.

Wheeler Oil Corp.'s No. 1 School Lot, 1,708 ft. E, 1,325 ft. N of SW cor. Sec. 16-9s-7w.
S.D. 3,720 ft.

Cameron Parish

Magnolia Pet. Co.'s No. 1 J. B. Broussard, 330 ft. E and S, out of NW cor. of the SW¼ of SE¼ of Sec. 13-12s-9w.
Drlg. shale 7,614 ft.

Steinberger Pet. Co.'s No. 1 Drew, 330 ft. out of NW cor. NE¼ of Sec. 26-10s-11w.
Location.

East Baton Rouge Parish

Superior Oil & Prod. Co.'s No. 1 Duplanter-Community, 1,500 ft. westerly along the N line from the NE cor. of D. A. and E. A. Duplanter's 130.7-ac. tract, thence 330 ft. at R/A.
T.D. 7,741 ft.; cutting and pulling csg. at 3,300 ft.

East Feliciana Parish

Thompson Creek Oil Co.'s No. 1 Fannie Noland, 2,600 ft. E and 1,580 ft. N of SW cor. Sec. 70.
S.D. 1,589 ft.

Evangeline Parish

Little Pigeon Oil Co.'s No. 1 McHugh, 1,300 ft. S, 229 ft. W of the NE cor. Sec. 26-12s-10e.
Moving in.

Iberia Parish

Meade Oil Co.'s No. 1 Hamilton, near town of Loze, in the NW cor. of parish, Sec. 38-12-5.
Drlg. gumbo 310 ft.

Texas Co.'s No. 1 State Fausse Point.
T.D. 5,128 ft.; prepare to sidetrack.

Jefferson Davis Parish

Howard Naylor et al's No. 1 Johnson-Bordeaux, 1,734 ft. N, 52 deg. N, 45 min. E, and 1,853 ft. S, 37 deg. 15 min. E out of SW cor. Sec. 39-10s-3w.
T.D. 800 ft.; W.O.C.

La Fourche Parish

Coastal Oil Co.'s No. 2 Constantine, 1,476 ft. N, 809 ft. E of SW cor. Sec. 26-21-22e.
Location.

St. Bernard Parish

Emerald Pet. Corp.'s "Shell Beach Properties" No. 1, on S edge of Bayou Louis, Sec. 31-13s-15e.
Drlg. wtr. sand 6,912 ft.

St. Martin Parish

Texas Co.'s No. 7 St. Martin Land, 2,042 ft. N, 500 ft. W of SE cor. of Sec. 17-8s-7e.
Drlg. sandy shale 5,472 ft.

Plaquemines Parish

Southern Sulphur Co.'s No. 1 Manhattan Fruit Co.
Rigging up.

Vermillion Parish

Delcambre & Shelton's No. 1 Adam Delcambre, south degrees E, 825 ft. from most northerly cor. of irregular Sec. 63-17-5.
Location.

S. W. TEXAS WILDCATS

Weed Ending July 6

Atascosa County

R. G. McIntyre et al's No. 1 H. W. Billime, J. D. Woodlief Sur.
M.I.M.

Bastrop County

Milam Drlg. Co.'s (Plateau Oil Co.) No. 1 Garrison, G.C.&S.F. Sur. No. 506, 1,500 ft. from W and 2,970 ft. from N lines of survey.
Standing 3,409 ft.; changing contractors and rigs; ready to resume drlg.

Palm Winn Oil Co.'s No. 1 Watson, Sur. No. 71 (workover).
T.D. 1,700 ft.; setting csg.

Malone & Owens' No. 1 Spooner, 500 ft. from N line, 3,550 ft. from SW line of Leverens Sur.
Dry and abd. 2,168 ft.

Monts & Beavens' No. 1 Leatherwood, 320 ft. from NW line and 550 ft. from NE line, Wm. McLanglin Sur.
Drlg. 2,560 ft.

Bee County

Bryce McCandless' No. 1 (J. J. Grissom) pullin, 330 ft. SW and SE lines of 80-ac. tract, in W. W. Gant Sur.
Drlg. 1,000 ft.

John Deering's No. 1 J. A. Pullin, 330 ft. out of SW cor. of Pullin E 80-ac. tract, W. W. Grant Sur.
Drlg. top of Jackson 2,255 ft.

Dirks Bros. and McMurry's No. 1 Johnson, 1,050 ft. S line, 150 ft. E line of tract, Uranga grant.
Coring 4,300 ft.

Firm Oil Co.'s No. 1 Copeland, 1,650 ft. from N line, 330 ft. from E line of lease, B. O. Hadley Sur.
Abd. 3,113 ft.

G. M. Church's No. 1 J. C. Woods, 330 ft. from N line, 330 ft. W of road, J. Ryan Sur., H.&G.N.R.R., Abstract 186.
R.U.; waiting on machinery.

Humble O. & R. Co.'s No. 1 Wood, 466 ft. out of SE cor. of 3,000-ac. tract, Wm. Burke Sur.
Drlg. 4,200 ft.

F. P. Hynes' No. 2 Plummer, F. J. Chessman Sur. 1, 40 ft. W of No. 1.
Drlg. below surface csg.

D. V. Smith et al's No. 1 Atkins, M. M. Wood Sur.
Rigging up.

Bexar County

Cherokee Drlg. Co.'s No. 1 Chapman, 2,100 ft. from S line, 3,200 ft. from E line, A. J. Leslie Sur.
S.D. 400 ft.

F. T. Chew's No. 4 J. T. Jones, 150 ft. from S line, 600 ft. NE of No. 3 J. E. Penna Sur.
Drlg. 140 ft.

Jas. B. Cunningham's No. 1 L. F. Ridder, 950 ft. S of Nelson Road, 1,300 ft. from E line, Block 5,196, Sur. No. 58.
Sand 485-519 ft.; putting on rotary.

C. J. LeComte's No. 1 Herbst, 150 ft. out of SW cor. of Manuel Leal Sur.
Drlg. 85 ft.

McPhee & Briggs' No. 1 F. Lamb, 9,200 ft. from S line, 800 ft. from W line of Sur. No. 3 (Manuel de Luna).
Shale 2,135 ft.; whipstocking and sidetracking; no report.

Mid-Texas Prod. Co.'s No. 1 C. G. Walker, cor. of Lot 21, 1½ miles E of Shadowland.
Spudded.

Carroll C. Raborn's No. 1 Claude McCauley, 150 ft. from N and NW lines of tract in Sec. 52, Wm. Harrison Sur.
Sand showing some oil 660 ft.; set csg.

C. C. Raborn's No. 1 A. B. Stephens, 1,630 ft. from N line, 1,540 ft. from W line of tract, P. B. Hayes Sur. No. 3.
S.D. 415 ft.

Blanco County

H. T. Roe and W. E. Nixon's No. 1 Polk Morrisey, 2,000 ft. from W line, 1,000 ft. out of SE cor., 1,600 ft. from N line of Thomas H. Webb Sur. No. 91.
100 ft.; no report.

Caldwell County

O. W. Killam's No. 1 W. D. Moore, 150 ft. from E cor. of tract, Jos. Burleson Sur.
Spudded.

Ogden & Reed's No. 1 Mrs. H. Brewer, 1,900 ft. from NE line, 150 ft. from SE line of tract in Martines Sur.
T.D. 1,745 ft.; abd. at 1,601 ft.

Dewitt County

Reginald F. Baurke's No. 1 W. C. Steinman Est., 937 ft. from N and S lines, Uriah Blue 1-3 League.
M.I.M.

Duval County

M. E. Davis' (Benedum & Trees) No. 1 G. B. Parr, 6,600 ft. from N line, 3,960 ft. from W line of tract, San Andres grant.
Drlg. hard lime 3,863 ft.

T. J. & M. Drlg. Co.'s No. 1 Davidson, 2,770 ft. S line, 330 ft. W line of Sur. 90.
S.D. 1,451 ft.

Magnolia Pet. Co.'s No. 2 Bennett, 887.5 ft. from S line, 664 ft. from E line of Sec. 432, S.K.&K. Sur.
Abd. 3,784 ft.

J. J. O'Byrne's No. 1 Ball, 330 ft. from S and W lines of Tract 3, Santas Flores grant.
Drlg. 4,260 ft.

Farr Oil Co.'s No. 1 Bishop Cattle Co., 330 ft. from S and W lines of NE ¼ of Sur. 74.
Coring for sand.

Fayette County

Ross Fenton's No. 1 Kasper (262-ac.), 3,000 ft. from NE line, 1,280 ft. from SW line, of Thos. Green Sur. No. 28.
Checking titles.

Frio County

Midland Oil Co.'s No. 1 Joint Stock Land Bank, 300 ft. from NE and SE lines of 60-ac. tract, B.S.&F. Sur.
Drlg. 1,700 ft.

Goliad County

Keystone Royalty Co.'s No. 1 M. Woods, SW part of county, 15,000 ft. from SW line, 5,000 ft. from NW line of J. Sherman Sur.
T.D. 5,950 ft.; to complete as gasser; 700 lbs. pressure on ⅝-in. choke.

Gonzales County

Midland Oil Co.'s No. 1 Don Billings, 450 ft. NE and SE lines of Hammon Sur.
Drlg. 2,500 ft.

Research Prod. Co.'s No. 1 Lanbeck, 708 ft. from NW line, 1,919 ft. from SW line, J. M. Salinas Sur.
Derrick.

Guadalupe County

J. E. Clark's (H. H. Weinert) No. 1 Loy, 800 ft. along road from SW cor., then 150 ft., J. K. Davis Sur.
Drlg. 1,310 ft.

Bob Gode et al's No. 1 Hicks, 1,320 ft. from E line, 150 ft. from S line of 189-ac. tract in Santo Y. Coy Sur.
Drlg. 516 ft.

A. D. Locke's No. 1 Lowman, 210 ft. from SE and SW lines of 2,500-ac. tract in C. Campbell Sur.
T.D. 1,810 ft.; abd. 1,590 ft. in sidetracked hole.

Mineral Oil Corp. of Texas' No. 1 Allen Phillips, 162 ft. from N line, 900 ft. from E line of tract, Cortinos Sur.
S.D. 888 ft.

W. A. Scrutchin's No. 1 A. H. Smith, 150 ft. from E line, 1,350 ft. from N line of 34.5-ac. tract, Jas. B. Cowan Sur.
C.O. 560 ft.

J. S. Suttle's No. 2 Baenziger, S of Seguin. Old well; R.U. to W.O.

Suttle et al's No. 1 Baenziger, 700 ft. from S line, 500 ft. from E line of 125-ac. tract, Monsola Sur.
T.D. 2,153 ft.; knocking out bridge.

W. J. Walton's No. 2 Zaboroski, 180 vrs. (500 ft.) SW of No. 1, 190.8 vrs. (530 ft.) S of Guadalupe River, 225-ac. tract, J. D. Clements Sur. No. 14.
T.D. 2,370 ft.; treating with acid.

Hidalgo County

Bluff Pet. Co.'s No. 1 Porcion Land Co., 330 ft. from N and E lines of NE 100 acres of S 500 acres of Share 14, Por. 49.
Drlg. 4,360 ft.

E. A. Davis' No. 1 Flores, 65 ft. from N line, 25 ft. from W line, Tract 312, Porcion 38.
Abd. 3,100 ft.

Downey & Morton's No. 1 Daskom, 450 ft. from E line, 55 ft. from S line of Blk. 34, Por. 45.
T.D. 4,415 ft.; to be reworked.

Henshaw et al's No. 1 Smith.
Derrick.

Maddox & Walter's No. 1 John H. Shary, 308 ft. from SE line, 440 ft. from SW line of Blk. 21, Porcion 58.
Drlg. 2,500 ft.

Madox Turnbull & Irwin's No. 1 J. H. Sharp, 320 ft. N and E lines of Tract 21, Porcion 59.
Drlg. 2,090 ft.

Mundy & Son's No. 1 Guerra, 853 ft. from W line, 1,275 ft. from N line of Tract 12, Porcion 41.
Moving in material.

Nedler & Graham's No. 1 Oscar Daskom, center of Blk. 42, Porcion 45.
Derrick wrecked; location.

Jim Hogg County

Darby Pet. Co.'s No. 1 Holbien, 330 ft. out of SW cor. of Lot 57, Sur. 5, Los Animas grant.
Abd. 4,014 ft.

Miller & Pippin's No. 1 Yeager, 527 ft. S line, 150 ft. E line of Blk. 6, Sur. 20.
Fishing 3,630 ft.

A. W. Phillips' No. 1 Allen, 660 ft. from S and E lines of Blk. 292, Pippin Subd. of the Randado grant.
Set csg.; W.O.C. 42 ft.

Sun Oil Co.'s No. 1 L. R. Brooks, 7,500 ft. from N and W lines of tract, Santo Domingo de Abajo grant.
Drlg. 4,495 ft.

Jim Wells County

Sunray Oil Co.'s (A. M. Hagan) No. 1 Robert Adams, 330 ft. N and E of SW cor. Sec. 10, M. Ruiz Sur.
R.U.; completing wtr. well.

Karnes County

W. C. McBride's No. 1 Boultinghouse, 642 ft. from SE line, 618 ft. from SW line of J. S. Menefee Sur.
Drlg. 3,300 ft.

H. A. Pagenkopt's No. 1 Sohm, 330 ft. from N line, 480 ft. from W line of 166-ac. tract, E. H. Garrett Sur. No. 257.
Drlg. 1,740 ft.

Harry Sample's No. 1 Seeger, 330 ft. from W line, 330 ft. SW of road, J. Pointevent Sur.
Drlg. 3,008 ft.

R. G. Tonkin's No. 2 Henke, 3,670 ft. from SW cor., 330 ft. from W line (location changed).
Location site cleared and pits completed.

Kendall County

J. E. Freeman's No. 1 J. M. Gerfers, 1,200 ft. out of SW cor. of 119-ac. tract, Mark Hodgson Sur., Sec. 796.
Standing 102 ft.

Kerr County

Emerald Oil Co.'s (Meteor Oil Co.) (Edminton & Walker) No. 1 Whitworth, 1,160 ft. from S line and 1,333 ft. from E line of Sec. 1,439 of the H.E.W.T. Sur.
S.D. in lime 800 ft.

G. F. Schreiner et al's No. 3 Jeff Love, 1,500 ft. SE of No. 1 and 1,530 ft. from SE cor. and 300 ft. from N line of Sec. 1,591.
T.D. 5,625 ft.; porous lime; S.W. 5,622-25 ft.; S.D.

Kleberg County

Parr & Ponder's No. 1 Sam Michalk et al, 330 ft. from N line and 775 ft. from S line, Blk. 37, Sec. 5; 5 miles SE Kingsville.
S.D. 1,050 ft.; cleaned out to 100 ft.

LaSalle County

Killingsworth Oil Co.'s No. 1 Yeager, Sur. 94, 100 ft. from W line, 300 ft. from N line of Sec. 94, Blk. 5, Lot 10.
Setting csg. 2,100 ft.

Lee County

McNeill Pet. Co.'s No. 1 Batey, 3,700 ft. from SW line, 4,200 ft. from SE Line, Wm. Nichols Sur.
Drlg. 1,340 ft.

Scharbach & Stowe's No. 1 Robert Otto.
Sand 2,450 ft.; small show oil; standing.

Live Oak County

Mills Bennett Prod. Co.'s No. 1 Watson et al, 3,653 ft. NE cor. of L. D. Camp tract, then 990 ft. N line of tract, Pablo Salinas Sur.
Spudded.

Earl Calloway's No. 1 George West hrs., Sec. 255, B.S.&F. Sur.
Moving in material.

Henderson Coquat's No. 1 Reagan, McGloin Sur., E of Nueces River and S of Oakville.
Standing 1,405 ft.; (corrected).

Gem Oil Co.'s No. 1 J. E. Lyne, (3,700 ft. from Devonian-Penn's No. 1 Lyne, dry hole) M. M. Lyne Sur., B.B.&M. Grant, Sec. 134, A-178.
Drlg. 2,750 ft.

Ray Nixon's No. 1 Chamberlain, 150 ft. from E line, 950 ft. from N line of Sec. 174, William Hill Sur.
Drlg. 300 ft.

J. O. Whittington's No. 2 Little, 2,640 ft. NW line, 1,650 ft. NE line of M. M. Shipp Sur. No. 788.
Moving in material.

McMullen County

John O. Gibson's No. 1 Mazur & McDowell, 330 ft. from N and W lines, Sec. 19, Blk. 4, H.T.&B. Sur.
Drlg. 650 ft.

J. O. Gibson's No. 1 G. C. West (Lowe), 150 ft. E line, 1,200 ft. S of NW cor. of Lot 1, Blk. 4, H.T.&B. Sur.
S.D. 465 ft.

Henderson Coquat's No. 1 Ezzell, midway N and S lines, 2,000 ft. from SE line, D. R. Fant Sur.
T.D. 768 ft.; comp.; small gas well.

Howard & Carpenter's No. 1 Jungman, 1,030 ft. from E line, 950 ft. from S line, Hely Sur.
800 ft.; no report.

Chas. A. Hall's No. 1 B. C. Claunch, 365 ft. from N line, 160 ft. from E line of 25-ac. tract, Michael Haley Sur.
Location.

Points et al's No. 1 Fahler, 432 ft. S line, 819 ft. E line of tract, Byrna pasture.
Standing 800 ft.

Medina County

Joe Dupree's No. 1 Batto, 258 ft. from E line, 957 ft. from N line, J. Ball Sur. No. 1,478.
S.D. 424 ft.

O. L. Gates and H. W. Hill, Jr.'s No. 1 Odom, 800 ft. from W line, 600 ft. from N line of H. Castro Sur. 174.
Set csg. at 220 ft. after testing 18 ft. of oil showing in lime.

W. T. Shoemaker's No. 1 Noonan, 52.5 ft. S 2 deg. 20 ft. E of old well, Sec. 349, M. Simon Sur.
Coring 450 ft.

Nueces County

Magnolia Pet. Co.'s No. 1 Baldwin, 330 ft. N and W lines of J. S. McGregor Sur. No. 39.
Sand 3,878-82 ft.; tested 1,800 ft. of oil; set csg.

Real County

H. J. Heartwell et al's No. 2 Mrs. M. S. Perry, 250 varas from NW line, 775 varas

from SW line of A.B.&M. Sur. No. 175.
Standing 3,320 ft.

San Patricio County

Masterson et al's (Tom Graham) No. 1 Wurzbach, 330 ft. from W line, 4,350 ft. from S line of C. C. Hornsby Sur.
Standing 5,521 ft.

Starr County

Accumulated Royalties' No. 1 Ferry, Lot 5, Blk. 2, B.&B. Subd., Por. 86.
Drlg. 1,905 ft.

C. R. Borah's No. 1 A. Guerra, San Jose grant, 330 ft. from N and 150 ft. from E lines of Sec. 6 (NE part of county).
S.D. 3,330 ft.

John H. Clopton's No. 1 Mrs. A. M. Kelsey-Bass, 2,950 ft. from W line, 3,610 ft. from E line of Porcion 88 in Porcion 86, Jurisdiction of Camargo.
Drlg. 3,605 ft.

Henshaw Bros.' (Sunray Oil Co.) No. 1 Sanches, 330 ft. from NE and NW lines of 40-ac. tract, Sur. 344.
Abd. 3,750 ft.

Hiram Reed's No. 1 Block Bros., Tract A-28, Porcion 80, Blk. 4.
Abd. 1,540 ft.

Travis County

R. C. Hill's No. 1 S. A. Johnson, 1,473 ft. from SE line, 306 ft. from NE line of 80-ac. tract, John W. Haun Sur.
Drlg. 245 ft.

W. F. Billingslea's No. 1 Lundgren Est., 330 ft. from NW line, 150 ft. NE of road, Blk. 17, Lemuel Kimbro League.
Drlg. 200 ft.

G. A. Arts' No. 1 Ralf, 454 ft. N line, 207 ft. W line of tract, Hancock Sur.
Spudded.

Swearingen & White's No. 1 Edwin Carlson, Hann Sur.
Rig.

Webb County

Arthur H. Wray's No. 1 Geo. Stuempke, Share 1, Brewster pasture, Galan grant.
S.D. 1,125 ft.; moving in electric rig; (corrected depth).

Willacy County

W. T. Daniel's No. 2 Armendiaz, near Rio Hondo, 7,798 ft. from E and W lines of Share 14.
T.D. 3,660 ft.; cleaning out to resume drilling.

Kingwood Oil Co.'s No. 1 Santa Rosa, Inc., 160 ft. from E line, 637 ft. from S line of Sec. 30, Blk. 16, Share 44, San Juan de Carricitas grant.
Drlg. 4,475 ft.

Williamson County

Fuchs & Walters' No. 1 S. Allmon, John Bevil Sur. No. 56, 150 ft. from SW line, 300 ft. most westerly SW line of 264-ac. tract.
Fishing 93 ft.; hole caving; S.D.

Gebhart's No. 1 Lawrence, 450 ft. from S line, 400 ft. from E line of Lawrence Sur.
Drlg. 355 ft.

H. B. and Otto Glass' No. 1 Albert, 3 miles SE of Taylor.
Rigging up.

H. L. Goff et al's No. 1 Alberta Klotz, 1,700 ft. from N line, 150 ft. from E line of 100-ac. tract, W. Cartwright Sur.
S.D. 1,250 ft.

Hays et al's No. 1 Pfluger, 150 ft. from E line, 150 ft. from S line, White Sur.
S.D. 915 ft.

Rue et al's No. 1 Chas. Bachmayer, 6 miles SE Taylor.
210 ft.; no report.

Wilson County

Midland Oil Co.'s No. 1 Billings, 8 miles S of Smiley.
Drlg. 300 ft.

Zapata County

F. H. Crow et al's No. 1 Daniel Yzaguirre, 330 ft. out of SW cor. Share 1, Porcion 14-15-16, D. Yzaguirre tract.
S.D. 2,500 ft.

Danvers & Harrison's No. 1 D. A. McAskill, 660 ft. SE and SW lines, Blk. 51, Edwards Subd., Borrego grant.
Set and cmtd. csg. 20 ft.

Humble O. & R. Co.'s No. 1 Eulalie Domingoez, 12,785 ft. from NE line, 1,320 ft. SE line of Por. 31.
Spudded.

Joe Palmer's No. 1 Emma A. Markrud, 150 ft. from NE and NW lines, Blk. 22, Sur. No. 516.
Rigging up.

Texas Royalty Investment Co.'s No. 1 N. J. Vela, 686 ft. from NE line, 300 ft. from NW line, Blk. 7, Por. 29.
S.D. 2,360 ft.

S. W. TEXAS PROVEN

Week Ending July 6

Carroll—Bastrop County

Nelson Puett's No. 5 Carroll Estate, 1,926 vrs. (5,350 ft.) from NW line and 619.20 vrs. (1,720 ft.) from SW line of Andrew Mayes Sur. No. 19.
T.D. 2,385 ft.; P.B. to 2,315 ft.; W.O.C.

Bateman—Bastrop County

Batts & Jarnson's No. 1 Mrs. Anneta Harris, 576 vrs. (1,600 ft.) NW line, 630 vrs. (1,750 ft.) SW line, John Maxmilian Sur. 22.
Drlg. 2,115 ft.

Cedar Creek—Bastrop County

Luling Oil & Gas Co.'s No. 4 Miller, N offset to Luling's No. 1 Hudmon.
Rigging up.

Luling Oil & Gas Co.'s No. 3-B Ruhman, 400 ft. SW of No. 7-B, 350 ft. SE of No. 2-B.
Sand 2,051-61 ft.; set csg.; W.O.C.

El Toro Oil Co.'s No. 1 J. J. Grisson, 150 ft. from N and W lines of 10-ac. tract, P. B. Early Sur.
Spudded; no report.

Rual Swiger's No. 6 Gardner, 150 ft. S and E lines of tract.
Sand 2,025-45 ft.; set csg.

Swiger et al's No. 4 Gardner, W offset to Vaughn producer.
Moving in material.

Dirks—Bee County

Dirks Bros.' No. 5 Harris, W end of Dugat Sur. No. 1,219.
Rigging up.

Dirks Bros.' No. 5 Roth, E offset to No. 1 Roth, Sec. 7.
Spudded and set surface csg.

Dirks Bros.' No. 4 Harris, 330 ft. S of N line, 660 ft. W of No. 2 J. L. Dugat Sur.
Drlg. plugs 3,886 ft.

Dirks Bros.' No. 4 Roth, 660 ft. E of No. 3, 330 ft. from N line, Sec. 7, J. M. Uranga gran:.
T.D. 3,845 ft.; I.P. 30 bbls. per hr.

L. A. Douglas' No. 1 Imogene Hall, 900 ft. from SE line, 330 ft. from SW line of 80 acres, T. J. Butler Sur.
Drlg. 3,700 ft.

Heyser, Heard & Walton's No. 3 Young, 330 ft. from NE line, 700 ft. NW of No. 2, F. P. Rawlins Sur.
Coring for Pettus.

Heyser, Heard & Walton's No. 4 Young, 330 ft. from NE line, 700 ft. NW of No. 3, F. P. Rawlins Sur.
Drlg. 2,000 ft.

Heyser Heard and Walton's No. 1 Young, 330 ft. S and E lines of tract, Rawlens Sur.
T.D. 3,891 ft.; I.P. 15 bbls. per hr.

Heyser Heard and Walton's No. 2 Young, 660 ft. N of No. 1, Rawlin's Sur.
T.D. 3,866 ft.; I.P. 15 bbls. per hr.

Humble O. & R. Co.'s No. 1 Shellenberger, E offset to Mills Bennett's No. 3-A Bassinger.
T.D. 3,892 ft.; I.P. 16 bbls. per hr.

Pettus—Bee County

L. T. Barrow's No. 3-A McKinney, S 65 deg. E, 1,500 ft. from No. 2-A.
1,200 ft.; no report.

Ray—Bee County

Dirks Bros.' No. 3 Ray, 660 ft. E of No. 2 and W road to Pettus in SW¼ of Sec. 7.
1,800 ft.; no report.

L. W. Littlejohn's No. 1 J. B. Borroum, 150 ft. out of SW cor. of 234-ac. tract, Wm. Gell Sur.
Derrick completed.

Magnolia Pet. Co.'s No. 1 Geo. Ray, 150 ft. from E line, thence 1,220 ft. from S along E line to NW line of survey, W. B. Blanchard Sur.
Drlg. 2,800 ft.

Tuleta—Bee County

Mills Bennett Prod. Co.'s No. 1-B C. W. Bassinger, 256 ft. from W line, 330 ft. from S line of SE¼ of NW¼ of Sec. 7, Ragley Subd., Uranga grant.
Derrick.

Leslie McKay's No. 4 Campbell, 330 ft. out of SW cor. of Brooks & Burleson Sur.
T.D. 3,951 ft.; I.P. 15 bbls. per hr.

Southwest Exploration Co.'s No. 1 Heyden & Bruckhan, C of farm tract, 330 ft. from N and W lines of Sec. 20, Uranga grant.
Rigging up.

Stanolind O. & G. Co.'s No. 2 Walton, 660 ft. S of No. 1; 330 ft. E of W line, 1779 ft. S of N line.
Sand 3,932-39 ft.; set csg. and W.O.C.

Texas Co.'s No. 2 Young, 330 ft. from S line, 682 ft. due W of No. 1, 379.95-ac. tract, Geo. Young Sur.
Sand 3,841-51 ft.; tested 630 ft. of oil and 85 lbs. pressure in 15 min.; set csg.

Tide Water Oil Co.'s (Simms) No. 1 J. K. Renno, 330 ft. N and W lines of tract in SE¼ of Sec. 21.
(Location changed); sand 3,334-43 ft.; testing.

Dobrowolski—Bexar County

D. C. Pegg and B. Miller's No. 7 Katie Strunk, 291 ft. from SW line and 304 ft. from NE line, 139.65-ac. tract, Juan Montez Sur.
Rig.

Von Ormy—Bexar County

T. and C. Owens' No. 1 Trawalter, 150 ft. W of river, 150 ft. from S line of tract No. 15, A. G. Trawalter Subd.
Spudded; no report.

Joe H. Parker's No. 1 James McClosky, 1,500 ft. N line, 475 ft. W line, F. A. Desafire Sur. No. 134.
Drlg. 530 ft.

A. J. Trawalter's No. 11 fee.
Moving in material.

Bruner—Caldwell County

Adams & Lyles' No. 2 Moore, 300 ft. from NE line, 150 ft. from NW line, Jasper Gilbert Sur.
Spudded.

Dawn Oil Corp.'s No. 2 Floyd Tiller.
Derrick.

Dunlap—Caldwell County

R. S. Boling's No. 2 C. F. Robertson, 575 ft. along Plum Creek from SW cor. of tract, 150 ft. from creek, John Neill Sur.
Drlg. 1,000 ft.; gas show.

O. B. Cunningham's No. 1 J. M. Pierce, 150 ft. from S and W lines of tract in S. Seale Sur.
Testing 2,369 ft.; no report.

Exploration Co.'s (F. Meyers) No. 1 W. T. Mooney, 816 ft. from S line, 450 ft. from W line of 95-ac. tract, S. Seale Sur.
Drlg. plugs 2,190 ft.

Bellard & Whiting et al's No. 1 Mrs. A. C. Bridges et al, 650 ft. from NW line, 450 ft. from NE line of Soloman Seale Sur.
Drlg. 1,105 ft.

W. T. Walker's No. 3 Walker, 330 ft. SE of No. 2.
Drilling.

Government Wells Pool—Duval County

Delange et al's No. 1 Hahl, 330 ft. from S and E lines, Blk. 5, Sur. 78.
Drlg. 2,130 ft.

Magnolia Pet. Co.'s No. 47 D.C.R.C., 1,650 ft. S of N line, 2,310 ft. W of E line, 660 ft. due N of No. 45 in Sec. 208, J. Poitevent Sur.
Sand 2,551-56 ft.

Magnolia Pet. Co.'s No. 14 Riley, 1,650 ft. from S line, 330 ft. from W line of W½ of Sur. 45.
Drlg. 1,600 ft.

Magnolia Pet. Co.'s No. 12 Riley, 900 ft. W line, 1,650 ft. S line of SW¼ of Sur. 45, 660 ft. due W of No. 5, 600 ft. due N of No. 11, J. Poitevent Sur.
T.D. 2,242 ft.; I.P. 100 bbls. per day.

Parr Oil Corp.'s No. 3 R. E. Glover, 330 ft. from N and E lines of SE¼ of SE¼ of Sec. 44, J. Poitevent Sur.
Location.

Simpson-Fell Oil Co. et al's No. 8 L. B. Moody, 990 ft. from N line, 330 ft. from E line of 100-ac. tract, G.B.&C.N.G. Sur. No. 60.
Drlg. 2,200 ft.

Smith & Story No. 14 Lundell 330 ft. N and E lines of SW ¼ of NE¼ of Sur. 48.
Sand 2,380-86 ft.; csg. 2,269 ft.; testing.

Sarnosa—Duval County

Sun Oil Co.'s No. 11 Cuellar Motor Co.; 990 ft. from NE line, 660 ft. NW of No. 9, B.S.&F. Sur. No. 576.
T.D. 3,421 ft.; 7-in. csg. at 2,385 ft. testing sand 2,395-2,421 ft.

Hoffman—Duval County

Bridwell's (Sun Oil Co.) No. 1 J. D. Sutherland, 330 ft. S line, 330 ft. E line of W½ of Sur. 122.
T.D. 2,712 ft.; sand 2,697-2,712 ft.; tested 180 ft. of oil; set csg.; standing.

Loma Nova—Duval County

Duval Oil Corp.'s No. 1 L. B. Moody, 330 ft. out of NE cor. of 40-ac. tract, Sec. 76.
T.D. 2,691 ft.; I.P. 500 bbls. per day.

Duval Oil Co.'s No. 1 Hubbard, Morris & Cummings Sur., Sec. 77, 330 ft. out of NE cor. NE¼ section.
Rigging up.

Frank Grovis' No. 2 Byland, 330 ft. S and E lines, Blk. 2, Sur. 78.
Drlg. 1,225 ft.

Henderson & Harvey's No. 1 Ruiz, 900 ft. from E line and 1,980 ft. from N line of Sur. 125.
Spudded.

Highland Oil Co.'s No. 1 Hubbard, NW cor. of Sur. 72.
Rigging up.

Humble O. & R. Co.'s No. 1-D Welder, 2,928 ft. from E line, 330 ft. from N line of Sur. 73.
Sand 2,714-24 ft.; completing.

Humble Oil & Refg. Co.'s No. 2 Hubbard, 330 ft. N and W lines of N½ of Sur. 84.
Sand 2,794-2,802 ft.; testing 2,808 ft.

Humble Oil & Refg. Co.'s No. 6 Ruiz, 330 ft. from W line and 914 ft. from S line of Sur. 553.
2,705 ft.; no report.

Rosen Oil Co.'s (Johnson) No. 2 Hubbard, 330 ft. from NW cor. of SW¼ of Sur. 48.
Drlg. plugs 2,796 ft.

Shell Pet. Corp.'s No. 1 Mrs. M. C. Hubbard, 2,196 ft. from S line, 330 ft. from E line of 320-ac. tract, Sur. 77.
Coring for sand 2,760 ft.

Stieren Oil Co.'s No. 3 Wright, Sur. 72.
Coring for sand.

Texas Co.'s No. 1 G. Ruiz, 330 ft. S and W of northern SW cor. of Sur. 41.
Set csg. 2,500 ft.

E. R. Thomas et al's No. 1 C. W. Hahl, J. Poitevent Sur., Sec. 63, 330 ft. out of SE cor. of SE¼ section.
T.D. 2,626 ft.; I.P. 500 bbls. per day; ½-in. choke.

Seven Sisters—Duval County

Dulce Oil Co. and Henderson & Harvey's No. 1 Serna, 150 ft. from E line, 330 ft. from N line of NW¼ of Sec. 384.
Testing 2,519 ft.

Humble O. & R. Co.'s No. 1 Serna, 2,310 ft. from W line, 330 ft. from S line, Sur. 384.
Drlg. 2,050 ft.

Humble O. & R. Co.'s No. 1 Smith, 990 ft. from NW line, 330 ft. from E line of 531.7-ac. tract, Sec. 382, B.S.&F. Sur.
Drlg. 2,125 ft.

Santa Clara Oil Co.'s No. 2 J. F. Welder heirs, 330 ft. from N line, 990 ft. from E line, 660 ft. due W of No. 1, Sec. 385, J. Poitevent Sur.
T.D. 2,468 ft.; set csg. at 2,462 ft.; preparing to drill plugs.

Pearsall—Frio County

Amerada Pet. Corp.'s No. 1 Kathman, 500 ft. from N and W lines of B. L. Crouch Sur.
T.D. 3,957 ft.; tested for well; set csg.; standing.

Amerada Pet. Corp.'s No. 1 W. H. Smith et al, 4,500 ft. from NE line, 1,650 ft. from SE line, Joseph V. Mason Sur. No. 222.
Drlg. 5,975 ft.

Darst Creek—Guadalupe County

Texas Co.'s No. 2 Posey (workover).
Old T.D. 2,606 ft.; set 7-in. csg. at 2,575 ft.; T.D. of sidetracked hole 2,582 ft.

Lucas—Live Oak County

Houston Oil Co.'s No. 32 Cartwright, 1,124 ft. N of No. 31, Trudo Sur.
S.D. 6,787 ft.; no report.

Three Rivers—Like Oak County

Benco Oil Corp.'s No. 1 E. Mahoney, 155 ft. from NW line of J. H. Harvey tract, 3,109 ft. SW of highway in Mark Killelly Sur.
S.D. 78 ft.

Turner & Walker's No. 1 C. F. Simmons, 50 ft. from N line, 300 ft. from W line, Farm Tract 513, Blk. 12, S. Hayes Sur.
Rigging up and S.D.

Sam Fordyce—Hidalgo County

Ben G. Barnett's No. 3 Missouri Pacific, N side of right of way and 1,600 ft. from W line of Porcion 41.
Drilled plugs 2,752 ft.

Cortez Oil Co.'s No. 2-C Smith, 230 ft. from N line, 690 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.

Cortez Oil Co.'s No. 3-C Smith, 230 ft. from N line, 1,150 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.

Cortez Oil Co.'s No. 1-C Smith, 230 ft. from N and W lines of NE 40 acres of Tract B-3, Porcion 41.
Cored sand 2,900 ft.

Double D. Oil Co. and Harrison's No. 2 Lula George, 230 ft. from W line, 690 ft. from S line of SW 40 acres of Tract 13, Porcion 41.
T.D. 4,001 ft.; P.B. to 2,700 ft.; I.P. 8 bbls. per hr.; ⅛-in. choke; 350 lbs. T.P.

Harrison et al's No. 2 (4) Guerra, 330 ft. from S and E lines of S 40 acres of Share 12, Porcion 41.
T.D. 2,757 ft.; I.P. 4 bbls. an hr. on 3/32-in. choke.

H. J. Porter's No. 2 C. E. Smith, N end of S½ of tract in Tract 278, Porcion 40.
Spudded; S.D.

Mercedes—Hidalgo County

Union Sulphur Co.'s No. 4 A.R.G.L.&I.C., 400 ft. N and W lines, Lot 1, Blk. 99, 1¼ miles SW discovery well.
Set csg.; W.O.C. 1,100 ft.

Union Sulphur Co.'s No. 1 American Rio Grande L. & I. Co., 400 ft. S and W of NE cor. of Lot 220, Blk. 59 (W.O.).
T.D. 6,431 ft.; drlg. 3,100 ft. in sidetracked hole.

Union Sulphur Co.'s No. 2 American Rio Grande L. & I. Co., 400 ft. S and E lines of tract, Blk. 86, Capisallo district (W.O.).
T.D. 8,044 ft.; drlg. 6,350 ft. in sidetracked hole.

Sandia—Jim Wells County

Magnolia Pet. Co.'s No. 6 Seeligson, 600 ft. W, 330 ft. S of No. 3 Canales Sur. No. 20.
Drlg. 6,350 ft.

O. W. Killam's No. 7 Wade, 1,320 ft. SE of No. 4, 200 ft. from NW line, 225 ft. from NE line, Lot 1, Blk. C, Lopez de Jean grant.
Drlg. 2,050 ft.

Weiner—Kendall County

Southwestern Dev. Co. Synd., Ltd.'s No. 1 W. G. Werner, 1,645 ft. from N line, 765 ft. from NW line of 320-ac. tract, J. F. Torrey Sur. No. 781.
Drlg. 150 ft.

Kingsville—Kleberg County

Ray Clark's No. 1 House, Lot 5, Blk. 37, K.T.&I. Co. Sur.
S.D. 1,000 ft.

Fidelity Exploration's No. 1 Paul O. Henry, 150 ft. from N line midway E and W lines of Blk. 2, Sec. 49, K.T.&I. Sur.
Set surface csg. 304 ft.; no report.

Fidelity Exploration Synd.'s No. 1 Vivian Kivlin, Sec. 4, Blk. 39, K.T.&I. Sur. on Vivian Kivlin lease.
Derrick up.

Jacob Pool—McMullen County

Inland Oil Co.'s No. 3 Lark, 150 ft. from W line, 1,285 ft. from N line, Blk. 133, Scrugham Sur.
T.D. 933 ft.; I.P. 40 bbls. per day.

Loma Oil Co.'s No. 5-W Jacob, 2,207 ft. from E line, 13 ft. from N line of Jacob Sur. No. 10.
Drlg. 300 ft.

Loma Oil Co.'s No. 2-W L. Jacob Corp., 220 ft. from E line, 1,320 ft. due N of No. 1-W, W. D. Benham Sur.
T.D. 925 ft.; I.P. 10 bbls. per day.

M. E. Young's No. 5-A Cox, E of Frio River across line from Lark tract in M. Hely Sur. (old well).
Sand 1,670 ft.; no report.

Loma Alta—McMullen County

Darby Pet. Corp.'s No. 1-C Hagist, 330 ft. out of NE cor. of 20-ac. tract, in Sec. 108, R. W. Mills Sur.
2,100 ft.; no report.

Humble Oil & Rfg. Co.'s No. 1 Atkinson, 330 ft. out of SE cor. of Sec. 13.
Drlg. 815 ft.

Illinois Pet. Co.'s No. 2-A Ellen Atkinson, 330 ft. from S line, 660 ft. due E of No. 1-A, Sec. 13, Martha J. Deen Sur.
Drlg. 2,219 ft.

Loma Oil Co.'s No. 1 Hagist, NE cor. of NW¼ of Sur. 108.
Sand 2,190-92 ft.; drlg. 2,215 ft.

Taylor—Medina County

Callahan & Robert's No. 1 Ray Taylor, 1,450 ft. NS line, 220 ft. EW line, Sur. No. 135.
Spudded; S.D.

Angelita—San Patricio County

Continental and Atkins & O'Neal's No. 3 Welder, 466 ft. from S line, 150 ft. W of SE cor. of Anthony tract, J. Hart Sur.

T.D. 5,547 ft.; P.B. to 5,307 ft.; to whipstock.

Plymouth—San Patricio County

Conroe Drlg. Co.'s (Heep) No. 1-D Welder, N of Sinton.
T.D. 6,008 ft.; to run test.

Heep Oil Corp.'s No. 3-E Welder, 466 ft. from E line, 933 ft. due S of No. 2-E, N 400 acres of Sec. 46, R. Montgomery Sur.
Drlg. 4,700 ft.

Heep Oil Corp.'s No. 2-E Welder, 466 ft. from E line, 1,399 ft. from N line, 933 ft. due S of No. 1-E, N 400-ac. of Sec. 46, R. Montgomery Sur.
T.D. 5,667 ft.; drlg. plugs.

Magnolia Pet. Co.'s No. 1 Corpus Christi Bank, 330 ft. E from river, thence 330 ft. at R/A, 9,300 ft. SW of Heep's No. 1 Welder, H. H. Hunter Sur.
Drlg. 4,100 ft.

Plymouth Oil Co.'s No. 5-C Welder, 933 ft. E of No. 5-C and 933 ft. N of No. 4-C.
Bldg. derrick.

Plymouth Oil Co.'s No. 5-C Welder, 933 ft. N of No. 1-E Welder of Heep.
Drlg. hard lime and shale 5,225 ft.

Plymouth's No. 6-C Welder, 933 ft. S of No. 4-C.
Drlg. sticky shale 2,915 ft.

Plymouth Oil Co.'s No. 7-C Welder, 933 ft. W of No. 5-C.
Drlg. 500 ft.; 13-in. csg. at 305 ft.

Plymouth Oil Co.'s No. 4-C Welder, E offset to Heep's No. 1-B.
Drlg. plugs 5,639 ft.; D.S. test showed 2,000 ft. of oil in 12 min. on ¼-in. choke, with 110 lbs. pressure.

Plymouth Oil Co.'s No. 3-C E. H. Welder, 744 ft. from N line, 2,000 ft. from E line, Sec. 49, Subd. No. 1, E. H. Welder ranch. 5,840 ft.; no report.

Plymouth Oil Co.'s No. 1-D E. H. Welder, 466 ft. from N line, 466 ft. SE of Ry., Sec. 1, Subd. No. 1, E. H. Welder ranch. T.D. 6,673 ft.; P.B. to 5,900 ft.; to be comp. as gas well.

Violet Oil Co.'s No. 1 Welder, 1,399 ft. from W line, 466 ft. from N line of 200-ac. tract, Sec. 47, Isaac Clover Sur.
Drlg. 2,400 ft.

Los Olmos—Starr County

H. L. Curry's No. 2 Bass, 660 ft. from S line, 1,835 ft. from E line of 640-ac. tract, Sec. 8, Porcions 75, 76 and 77.
Abd. 1,250 ft.

H. C. Horter, Trustee, No. 1 Sanchez, 150 ft. from N and W lines Blk 3, Share 74, Porcion 72.
Sand 501-505 ft.; set csg.; W.O.C.

Ed Linberg's No. 7 Bass, 1,500 ft. from W line, 1,675 ft. from N line of Share 6, Porcion 75.
S.D. 500 ft.

Placetas—Starr County

Hughston Oil Co.'s No. 1-A Gregg-Wood, S end of Por. 84; replacement well, 990 ft. S of State Highway No. 4.
3,370 ft.; no report.

Rio Grande—Starr County

Hiram Reed's No. 4 D.&C., 300 ft. W of No. 2, Blk. 3, Tract 21, Porcion 80.
Set csg. 20 ft.

Hiram Reid's No. 2 D.&C., 150 ft. from S and E lines, Blk. 3, Tract 21, Por. 81.
Abd. 1,500 ft.

W. W. Zimmerman's No. 1 Doyno, 150 ft. from S line, 822 ft. from W line of 40-ac. tract, Lot 1, of Share A-77, Por. 81.
Sand 1,444-50 ft.; bailing.

Saxet—Nueces County

Houston Oil Co.'s No. 4 Morgan, 660 ft. E of No. 3, Sec. 7, Range 5.
Location.

Houston Oil Co.'s No. 4 Walton, 330 ft. EW line, 1,560 ft. NS line.
Drlg. shale and lime 3,933 ft.; no report.

Magnolia Pet. Co.'s No. 2 W. W. Walton, 330 ft. from E line, 289 ft. from S line of 92.11-ac. tract, Enrique Villareal Sur.
Location.

Southern Minerals' No. 1-A Rand Morgan, Roberts Sur.
Drlg. 7,050 ft.

Bruni—Webb County

Associated Oil Co.'s No. 5 Bruni, 2,310 ft. SW line, 330 ft. NW line of 500-ac. tract, Sur. 6-7, Arispe grant.
T.D. 3,391 ft.; I.P. 6 bbls. per hr.; ¼-in. choke.

Associated Oil Co.'s No. 3 A. M. Bruni, 660 ft. N of No. 2, 330 ft. from W line, 5,000-ac. tract, Blk. 7, M. Arispe grant.
Location.

Highland Oil Co.'s No. 8 Bruni, 1,650 ft. from NW line, 330 ft. from NE line, Sur. 7.
Coring 3,407 ft.; had sand 3,387-94 ft.; no report.

Highland Oil Co.'s No. 12 A. M. Bruni Estate, 520 ft. E of No. 6, 330 ft. from S line of 200-ac. tract, M. Arispe grant.
Location.

O. W. Killam's No. 38 Bruni, 330 ft. from NW line, 800 ft. from SW line of M. Arispe grant No. 6.
T.D. 2,281 ft.; I.P. 10,000,000 ft. of gas per day.

Laurel—Webb County

South Texas Oil Co.'s No. 1 Laurel Bros., 100 ft. from E line, 200 ft. from S line of Sec. 269, Blk. 2, C.C.S.D.&R.G.N.G. Sur.
Rigging up.

West Cole Pool—Webb County

Allison et al's No. 1 Moses Jones, 330 ft. S and E lines of NE 100 acres, Sur. 1,640.
Standing 910 ft.

Ross Barnhart's No. 1 de la Garza, 1,500 ft. from N line, 200 ft. from E line of Sur. 262.
T.D. 2,406 ft.; bailing.

Magnolia Pet. Co.'s No. 2-G Benavides, 313 ft. from SW line, 347 ft. from NW line, Blk. 186, Arispe grant.
Drlg. 1,600 ft.

Magnolia Pet. Co.'s No. 3 S. S. Benavides, 200 ft. from N and W lines of Sec. 696, B.S.&F. Sur.
Sand 2,331-41 ft.; I.P. 40 bbls. per day.

Frank Smith's No. 1 Moses Jones, 2,150 ft. E line, 2,850 ft. S line, Sur. 1,640.
Drlg. 610 ft.

Lopez—Webb County

Mills Bennett Prod. Co.'s No. 2 Jesus Lopez, Jr., 330 ft. out of SE cor., 1,130 ft. SE of No. 1, Sec. 73, Share 10-B, C.C.S. D.&R.G.N.G. Sur.
Spudded.

Noack—Williamson County

Coffield & Lanning's No. 3 Heap, 200 ft. from N line, 225 ft. from W line of tract in White Sur.
Location.

R. R. Ogden's No. 1 Matteck, 150 ft. N and W lines of 108.5-ac. tract in White Sur.
Location.

W. L. Stephens' No. 1 J. P. Carlson, 200 ft. out of NW cor., 900 ft. SE line, 610 ft. SW line of Samuel C. Jones Sur.
Drlg. 800 ft.

Byersville—Williamson County

Elmer Rule et al's No. 1 Bachmeyer, Cartwright Sur., 450 ft. from NW line, 150 ft. from NE line, 70.1-ac. tract.
Moving in material.

Taylor Ref. Co.'s No. 9-A Sladek, H. White Sur., 150 ft. from NE line, 1,200 ft. SE line (creek).
Shale 700 ft.; no report.

Blas Uribe—Zapata County

Martinez, Eravi & Daniels' No. 1 A. M. Bruni, 150 ft. from SE line, 750 ft. from NW line of 40-ac. tract, Blk. 44, Blas Uribe Sur. No. B-8.
Sand 1,829-24 ft.; set csg.

Charco Redondo—Zapata County

H. C. Dean's No. 1 J. N. G. Martinez, 330 ft. from NE and NW lines Blk. 34, Share 3.
S.D. 100 ft.

Stover et al's No. 1 Martinez, 330 ft. from SE line and 847 ft. from NE line, Blk. 125, Share 1, Grullo Grant.
Drlg. 590 ft.

Escobas—Zapata County

Kleiner & Hill's No. 12 Jose Gutierrez, 393.9 ft. from NW line, 172 ft. from NE line, Share 4, Fansler Parti. of Las Comitas grant.
Sand 1,221-28 ft.; coring 1,228 ft.; no report.

Reliable Oil Corp.'s No. 3 Alice Haynes, 500 ft. from SE and SW lines of Blk. 4, Comitas and Villa grants.
Spudded.

Jennings—Zapata County

Texas Co.'s No. 71 Jennings, 2,563 ft. NW of No. 69, 17,985 ft. to NE line of survey, 9,619 ft. to SE line of survey, Cerrito Blanco grant.
Drlg. 1,235 ft.

Lopena—Zapata County

Gem Oil Co.'s No. 1 Ramirez, 330 ft. from NW and SW lines of Share 13, Por. 17.
Abd. 3,502 ft.

J. J. O'Hern's No. 1 Alexander, 2,000 ft. from SW line of Share 7 and 550 ft. from SE line of Porcion 22.
Drlg. 650 ft.

Trowel et al's No. 1 W. Z. Guerra.
Coring brittle shale 1,790 ft.; no report.

Mirando Valley—Zapata County

C. L. Smith's No. 1 Robert Hinnant, 330 ft. out of NW cor. Sec. 307, Blk. 27, F. M. Makeig Sur.
Drlg. 2,198 ft.

CALIFORNIA WILDCATS

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Shell Oil Co., No. 5 Capitan, Santa Barbara Co.	5- 4-30	963	sd. sh. drlg.
General Petroleum, No. 15 Capitan, Santa Barbara Co.	32- 5-30	332	sd. sh. drlg.
Freeman, M. J., No. 1 Purisima, Santa Barbara Co.	11- 7-33	1,025	suspended
Shell Oil Co., No. 1 Goleta, Santa Barbara Co.	10- 4-29	843	gr. sd. drlg.
Scully & Snyder, No. 1 Naples, Santa Barbara Co.	7- 4-29	6,447	suspended
Barnsdall-Rio Grande, No. 12 Elwood, Santa Barbara	tideland	4,052	sd. sh. drlg.
Barnsdall-Rio Grande, No. 2 Elwood, Santa Barbara	15- 4-29	6,492	suspended
Bankline Oil Co., No. 6 Elwood, Santa Barbara Co.	tideland	3,741	sd. sh. drlg.
Signal Oil & Gas Co., No. 4 Elwood, Santa Barbara Co.	tideland	3,465	sd. sh. drlg.
Caroline Spalding, No. 10 Elwood, Santa Barbara Co.	tideland	3,760	flow 3,654 b.d.
Las Posas Pet., No. 1 Las Posas, Ventura Co.	22- 3-20	8,116	cmtd. 7,255
Calco Pet. Co., No. 1 Las Posas, Ventura Co.	17- 3-20	1,961	sd. sh. drlg.
Union Oil Co., No. 1 Bardsdale, Ventura Co.	12- 3-20	3,336	prod. test
Dabney, H. R., No. 1 Bardsdale, Ventura Co.	2- 3-19	510	suspended
Texas Co., No. 1 Fillmore, Ventura Co.	29- 4-19	....	location
Oil Ridge Oil Co., No. 1 Ventura, Ventura Co.	1- 4-19	1,700	sd. sh. drlg.
El Rancho Oil Co., No. 1 South Mountain, Ventura Co.	9- 3-19	1,113	suspended
Texas Oil Co., No. 1 South Mountain, Ventura Co.	4- 3-19	7,423	reaming
Paloma Oil Co., No. 1 Susana, Ventura Co.	12- 2-18	2,087	sd. sh. drlg.
Bolsa Chica Oil Co., No. 2 Piru, Ventura Co.	4- 4-18	2,788	pump 70 b.d.
Prop. Service Corp., No. 1 Lloyd, Ventura Co.	24- 3-23	8,341	gr. sd. drlg.
General Pet., No. 1 Oxnard, Ventura Co.	26- 2-23	....	rigging up
Continental Oil Co., No. 4 Miguelito, Ventura Co.	23- 3-24	4,896	sd. sh. drlg.
Amerada Pet., No. 3 Blackwell Corner, Kern Co.	17-26-19	3,892	sd. sh. drlg.
Standard Oil Co., No. 1 Lost Hills, Kern Co.	2-26-20	4,595	sd. sh. drlg.
Continental Oil Co., No. 1 McDonald, Kern Co.	7-28-20	5,305	suspended
Belmac Drlg. Co., No. 1 McKittrick, Kern Co.	22-29-21	1,282	sd. sh. drlg.
General Pet. Co., No. 1 South Belridge, Kern Co.	30-28-21	11,377	suspended
Standard Oil Co., No. 2-A North Belridge, Kern Co.	36-27-20	8,000	sd. sh. drlg.
Standard Oil Co., No. 3 North Belridge, Kern Co.	36-27-20	....	rigging up
Belridge Oil Co., No. 32-35 North Belridge, Kern Co.	35-27-20	6,650	sd. sh. drlg.
Belridge Oil Co., No. 33-35 North Belridge, Kern Co.	35-27-20	6,080	sd. sh. drlg.
Union Oil Co., No. 19 North Belridge, Kern Co.	36-27-20	3,978	sd. sh. drlg.
Union Oil Co., No. 20 North Belridge, Kern Co.	36-27-20	3,591	sd. sh. drlg.
Woods & Bailey, No. 1 McFarland, Kern Co.	16-26-26	....	rig suspended
Cimarron Oil Corp., No. 1 Delano, Kern Co.	14-25-27	2,440	suspended
Standard Oil Co., No. 1 Delano, Kern Co.	1-25-28	2,455	gas; shut in
Standard Oil Co., No. 2 Delano, Kern Co.	1-25-28	3,256	gas; shut in
Standard Oil Co., No. 3 Delano, Kern Co.	12-25-28	4,160	sd. sh. drlg.
Standard Oil Co., No. 4 Delano, Kern Co.	34-24-28	2,382	cmtd. 520
Trico Oil & Gas Co., No. 1 Delano, Kern Co.	3-25-28	2,525	gas well
Trico Oil & Gas Co., No. 3 Delano, Kern Co.	36-24-22	4,835	P. B. 2,223
Trico Oil & Gas Co., No. 5 Delano, Kern Co.	3-25-28	2,467	gas well
Baker, Cliff, No. 1 Poso Creek, Kern Co.	33-27-28	1,662	sd. sh. drlg.
Getty, George F., No. 6 Kern Front, Kern Co.	26-28-27	1,731	sd. sh. drlg.
Kern River Oilfields, No. 3 Kern Front, Kern Co.	25-28-27	1,830	wet; recmtd.
Associated Oil Co., No. 2 Kern Front, Kern Co.	26-28-27	....	rigging up
Deep Zone Oil Co., No. 1 Kern Front, Kern Co.	29-28-27	2,631	sd. sh. drlg.
Republic Petroleum, No. 2 Kern Front, Kern Co.	24-28-27	1,927	cmtd. 1,846
Stevens Pet. Co., No. 1 Kern Front, Kern Co.	13-27-27	2,635	dry; abd.
Barnsdall Oil Co., No. 4 Mountain View, Kern Co.	32-20-29	5,212	redrl. 1,000
Hancock Oil Co., No. 7 Mountain View, Kern Co.	14-30-28	5,346	flow 6,000 b.d.
Shell Oil Co., No. 2 Mountain View, Kern Co.	32-20-29	5,853	gr. sd. drlg.
C. C. M. Oil Co., No. 1 Mountain View, Kern Co.	11-30-28	5,554	sd. sh. drlg.
Texas Co., No. 5 Mountain View, Kern Co.	15-30-28	4,768	sd. sh. drlg.
Union Oil Co., No. 7 Mountain View, Kern Co.	15-30-28	5,592	suspended
Union Oil Co., No. 8 Mountain View, Kern Co.	23-30-28	5,609	recmtd. 5,584
General Petroleum, No. 4 Mountain View, Kern Co.	14-30-28	5,628	test W. S. O.
Vesta Pet. Co., No. 1 Mountain View, Kern Co.	19-30-29	5,194	P. B. 4,959
Mohawk Oil Co., No. 10 Mountain View, Kern Co.	30-30-29	5,882	O. S. drlg.
Mohawk Oil Co., No. 11 Mountain View, Kern Co.	30-30-29	5,198	sd. sh. drlg.
Mohawk Oil Co., No. 12 Mountain View, Kern Co.	30-30-29	1,356	cmtd. 1,191
Sovereign Oil Co., No. 4 Mountain View, Kern Co.	30-30-29	6,177	flow 1,460 b.d.
Jergins Trust, No. 6 Mountain View, Kern Co.	30-30-29	5,780	test W. S. O.
Standard Oil Co., No. 8 Mountain View, Kern Co.	23-30-28	4,974	sd. sh. drlg.
Standard Oil Co., No. 9 Mountain View, Kern Co.	24-30-28	2,479	cmtd. 1,201
Standard Oil Co., No. 10 Mountain View, Kern Co.	13-30-28	....	bldg. rig
Wood-Callahan Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	....	rigging up
Ohio Oil Co., No. 1 Mountain View, Kern Co.	33-30-29	5,999	suspended
Ohio Oil Co., No. 2 Mountain View, Kern Co.	33-30-29	5,776	sd. sh. drlg.
Mountain View Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	5,650	fish D. P.
United Expl. Co., No. 1 Bakersfield, Kern Co.	23-30-27	....	bldg. rig
Jergins Trust Co., No. 6 Edison, Kern Co.	24-30-29	1,315	suspended
Jergins Trust, No. 7 Edison, Kern Co.	13-30-29	1,277	pump 170 b.d.
Jergins Trust, No. 8 Edison, Kern Co.	24-30-29	1,048	pump 150 b.d.
Chaulk Oil Co., No. 1 Edison, Kern Co.	5-30-29	3,855	cleaning out
Shell Oil Co., No. 8 Edison, Kern Co.	14-30-29	1,668	completing
Sunday, G. M., No. 1 Edison, Kern Co.	5-30-30	362	sd. sh. drlg.
Nelco Oil Co., No. 1 Edison, Kern Co.	5-30-29	4,075	suspended
General Pet., No. 5 Edison, Kern Co.	15-30-29	3,753	wet; recmtd.
General Pet., No. 6 Edison, Kern Co.	24-30-29	....	rigging up
Appling, C. E., No. 1 Edison, Kern Co.	4-30-29	3,587	recmtd.
Berry Oil Co., No. 1 Edison, Kern Co.	10-30-29	960	sd. sh. drlg.
Woodward Oil Co., No. 3 Edison, Kern Co.	36-29-29	685	suspended
Woodward Oil Co., No. 4 Edison, Kern Co.	36-29-29	480	reaming
Woodward Oil Co., No. 5 Edison, Kern Co.	36-29-29	884	sd. sh. drlg
Lucas, Don, No. 1 Edison, Kern Co.	26-29-29	554	sd. sh. drlg
General Pet., No. 1 Arvin, Kern Co.	1-32-29	5,798	sd. sh. drlg
Hall-Baker Co., No. 1 Arvin, Kern Co.	16-31-30	1,250	suspended
Hall-Baker Co., No. 3 Arvin, Kern Co.	21-31-30	1,561	sd. sh. drlg.
Hutcheson & Osborne, No. 1 Arvin, Kern Co.	32-30-30	531	cleaning out
Superior Oil Co., No. 1 Semi-Tropic, Kern Co.	23-27-23	....	bldg. rig
Fullerton Oil Co., No. 1 Semi-Tropic, Kern Co.	1-27-22	2,391	gas; shut in
Fullerton Oil Co., No. 2 Semi-Tropic, Kern Co.	14-27-23	2,463	gas; shut in
Fullerton Oil Co., No. 3 Semi-Tropic, Kern Co.	9-27-23	3,150	P. B. 3,045
Fullerton Oil Co., No. 4 Semi-Tropic, Kern Co.	26-27-23	2,395	gas; shut in
Fullerton Oil Co., No. 5 Semi-Tropic, Kern Co.	8-27-25	....	rigging up
Fullerton Oil Co., No. 6 Semi-Tropic, Kern Co.	25-27-22	2,146	cmtd. 516
Fullerton Oil Co., No. 7 Semi-Tropic, Kern Co.	25-27-23	....	location
Standard Oil Co., No. 2 Semi-Tropic, Kern Co.	5-27-23	4,154	sd. sh. drlg.
Standard Oil Co., No. 3 Semi-Tropic, Kern Co.	7-27-23	2,355	gas; shut in
Standard Oil Co., No. 4 Semi-Tropic, Kern Co.	9-27-23	3,200	sd. sh. drlg.
Standard Oil Co., No. 5 Semi-Tropic, Kern Co.	9-27-23	2,151	sd. sh. drlg.
Standard Oil Co., No. 6 Semi-Tropic, Kern Co.	8-27-23	....	rigging up
Standard Oil Co., No. 7 Semi-Tropic, Kern Co.	1-27-22	....	bldg. rig
Standard Oil Co., No. 8 Semi-Tropic, Kern Co.	12-27-22	1,446	cmtd. 517
Standard Oil Co., No. 9 Semi-Tropic, Kern Co.	1-27-22	....	rig suspended
Milham Expl. Co., No. 1 Semi-Tropic, Kern Co.	15-27-23	3,122	cmtd. 3,013
Milham Expl. Co., No. 2 Semi-Tropic, Kern Co.	15-27-23	....	rigging up
Shell Oil Co., No. 1 Buena Vista, Kern Co.	9-32-25	7,254	hd. sd. drlg.
Bender, E. L., No. 1 Temblor, Kern Co.	2-29-20	952	sd. sh. drlg.
Reserve Oil & Gas Co., No. 1 Tejon, Kern Co.	2-10-19	2,699	pump 62 b.d.
Reserve Oil & Gas Co., No. 3 Tejon, Kern Co.	12-10-19	930	sd. sh. drlg.
Silver Gate Oil Co., No. 1 Tejon, Kern Co.	7-10-19	1,154	sd. sh. drlg.
Taft Well Drlg. Co., No. 1 Kreyenhagen, Fresno Co.	33-22-16	2,890	sd. sh. drlg.
Union Oil Co., No. 1 Lillis-Kettleman, Fresno Co.	24-21-16	10,944	redrl. 8,250
K. N. D. A., No. 56 Kettleman-North, Kings Co.	8-22-18	10,249	dry; abd.
Standard Oil, No. 3 Kettleman Middle, Kings Co.	29-23-19	7,108	br. sh. drlg.
Pet. Sec., No. 2 Kettleman Middle, Kings Co.	30-23-19	....	bldg. rig
Continental Oil Co., No. 1 Kettleman-South, Kern Co.	7-25-20	6,903	rig Hydril
Farrel Pet., Well No. 1, San Luis Obispo Co.	18-31-12	1,760	sd. sh. drlg.
Willett Oil Co., No. 1 Cholame, San Luis Obispo Co.	10-25-15	3,687	suspended
Kings River Oil Pool, Well No. 1, Tulare Co.	29-16-23	3,253	suspended
Schuster, C. R., No. 1 Tulare, Tulare Co.	27-22-23	....	rig suspended
Commonwealth Consd Gas, No. 1 Tulare Lake, Kings	21-22-20	2,490	gas well
Commonwealth Consd. Gas, No. 2 Tulare Lake, Kings	21-22-20	710	sd. sh. drlg.
Amerada Pet., No. 1 F. L. D., San Joaquin Co.	15- 2-5	5,875	hd. sd. drlg.
Pure Oil Co., No. 1 Chowchilla, Madera Co.	7-10-14	8,402	gas well; idle
Northern Counties Pet., No. 1 Tehama, Tehama Co.	25-24-3	4,505	hd. sh. drlg.
Texas Co., No. 1 Petrolia, Humboldt Co.	1- 3-2	6,133	test for gas
Shell Oil Co., No. 1 Branch, Monterey Co.	34-24-10	3,540	sd. sh. drlg.
Trico Oil & Gas Co., No. 1 Noonan, Solano Co.	10- 5-1	731	dry; abd.

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Allen Bros., No. 1 Athens, Los Angeles Co.	18- 3-13	....	fdn. laid
Republic Pet. Co., No. 1 Lawndale, Los Angeles Co.	18- 3-14	5,761	hd. sd. drlg.
Associated Oil Co., No. 4 Inglewood Deep, Los Angeles	7- 2-14	4,458	sd. sh. drlg.
Scientia Oil Co., No. 1 Inglewood Deep, Los Angeles	7- 2-14	4,590	cmtd. 4,566
Standard Oil Co., No. 5 Inglewood Deep, Los Angeles	17- 2-14	6,284	cleaning out
Standard Oil Co., No. 7 Inglewood Deep, Los Angeles	17- 2-14	....	rigging up
Shell Oil Co., No. 3 Inglewood Deep, Los Angeles Co.	8- 2-14	3,885	flow 1,580 b.d.
Sunbar Pet. Co., No. 1 Inglewood Deep, Los Angeles Co.	16- 2-14	....	suspended
Allied Pet., No. 1 Del Rey, Los Angeles Co.	28- 2-15	6,510	sd. sh. drlg.
Blackline Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,634	fish D. P.
Harper & Williams, No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,479	O. S. drlg.
Coast Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,696	pump 400 b.d.

Lucas, Andrew, No. 1 Del Rey, Los Angeles Co.	25- 2-15	....		rigging up
Ritelube Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	7,048		pump 50 b.d.
Mathews Pet. Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,523		cleaning out
Birch Royer Oil Co., No. 1 Del Rey, Los Angeles Co.	34- 2-15	6,481		sd. sh. drlg.
Embee Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,626		O. S. drlg.
Joyce Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,742		form.; wet
Royalty Serv. Corp., No. 2 Del Rey, Los Angeles Co.	27- 2-15	6,485		O. S. drlg.
Union Oil Co., No. 13 Del Rey, Los Angeles Co.	27- 2-15	6,001		sd. sh. drlg.
Union Oil Co., No. 14 Del Rey, Los Angeles Co.	27- 2-15	....		rigging up
Union Oil Co., No. 15 Del Rey, Los Angeles Co.	27- 2-15	....		rigging up
Del Rey Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	4,656		sd. sh. drlg.
Treasure Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	....		bldg. rig
Wineco Oil Co., No. 1 Del Rey, Los Angeles Co.	26- 2-15	....		bldg. rig
West American Oil Co., No. 1 Bandini, Los Angeles Co.	17- 2-12	4,755		sd. sh. drlg.
Western Gulf, No. 1 Bandini, Los Angeles Co.	16- 2-12	5,793		sd. sh. drlg.
Vanco Dev. Co., No. 1 Artesia, Los Angeles Co.	25- 3-12	5,299		sd. sh. drlg.
Monarch Oil Corp., No. 1 Topanga, Los Angeles Co.	5- 1-16	131		tech. spud
Camino Co., No. 1 Montebello, Los Angeles Co.	9- 2-11	....		location
Texas Co., No. 1 Montebello, Los Angeles Co.	5- 2-11	4,781		hd. sd. drlg.
Universal Consd., No. 3 Montebello, Los Angeles Co.	5- 2-11	....		bldg. rig
Universal Consd., No. 4 Montebello, Los Angeles Co.	5- 2-11	....		location
Woodward Oil Co., No. 1 Montebello, Los Angeles Co.	4- 2-11	3,180		sd. sh. drlg.
Wilshire Oil Co., No. 1 Montebello, Los Angeles Co.	5- 2-11	3,124		hd. sd. drlg.
Frontier Oil Co., No. 1 Pico, Los Angeles Co.	7- 2-11	3,731		sd. sh. drlg.
International Dev. Co., No. 1 Saugus, Los Angeles Co.	34- 5-16	1,650		P. B. 1,200
Huntington Cent. Oil Co., No. 1 Newport, Orange Co.	29- 6-10	....		bldg. rig
Wilshire Oil Co., No. 1 Newport, Orange Co.	29- 6-10	1,365		bldg. rig
Great American Pet., No. 2 East Coyote, Orange Co.	22- 3-10	3,474		pump 35 b.d.
Viking Oil Co., No. 1 Richfield, Orange Co.	29- 3-9	3,000		milling

E. C. TEXAS WILDCATS

Week Ending July 6

Wildcats—Anderson County

Hunt and Sun Oil Co.'s No. 2 Alice Scott, 30 ft. N of No. 1, James Crawford Sur. S.D. 1,153 ft.

J. W. Luttes' No. 1 C. McKee, 2,640 ft. from N line of lease and survey and 330 ft. from W line of McKey 800-ac. tract. Elev. 391 ft.; S.D. 4,516 ft.

Camp Hill Area

Gulf Prod. Co.'s No. 2-A Southern Lbr. Co., 330 ft. W along N line of 115.9-ac. tract from SE cor. of L. B. Ross' 37.6-ac. tract, and 330 ft. S at R/A. south offset to No. 1 Ross.
Drlg. 692 ft.

Gulf Prod. Co.'s No. 2-A Southern Lbr. Co., 330 ft. N along W line of 115.9-ac. tract from SE cor. of D. A. Maddox 106-ac. tract, and 330 ft. E at R/A. east offset to No. 1 Maddox.
Rigged up.

Cayuga Area—Anderson County

Tide Water Oil Co. et al's No. 21-A Wells, 4,079 ft. N and 2,332 ft. W of lease, S. Edmondson Sur. (Trinity test).
Drlg. 8,675 ft.

Long Lake Area—Anderson County

Tide Water Oil Co. et al's No. 1 Shaw and Kern, 1,400 ft. from S and 2,333 ft. from E line, in D. Parker Sur.
Drlg. 4,700 ft.

Bowie County

Tex-Ark. Oil Co.'s No. 1 Hamilton Estate, 600 ft. E and 350 ft. N lines, J. Milan Sur., 4 miles S of Red River.
S.D. 1,121 ft.

Woodley & Bentley's No. 1 Lumpkin, 330 ft. out of NE cor. of 245-ac. tract, J. McDermot Sur., 1 mile SW of Dalby Springs.
Moving in material.

Cherokee County

H. A. Baker et al's No. 1 T. Smith, 630 ft. S. 660 ft. W of SW cor. of W. A. Newton's 260-ac. tract, 2½ miles N of Jacksonville, J. Pineda Sur.
Base Pecan 3,937 ft.; top Austin 4,490 ft.; drlg. 4,575 ft.

Jacksonville O. & G. Co.'s No. 1 H. D. Henderson, 660 ft. from N and W lines of 40-ac. tract out of Tankersley 104-ac. tract, 5 miles NE of Jacksonville, J. Pineda Sur.
S.D. 693 ft.

O'Connor and St. Germaine Oil Co.'s No. 1 Long, 150 ft. E and 450 ft. E. G. S. Long Sur., 2 miles S of Mount Selman.
S.D. 80 ft.

Shell Pet. Corp.'s No. 1 New Birmingham Dev. Co., 190 ft. S and 150 ft. E from SE cor. T. J. Wood 140-ac. lease Levi Jordan Sur.
Drlg. 3,180 ft.

S. Thompson's No. 1 G. H. Allen, 330 ft. out of SW cor. 150-ac. tract, Wm. King Sur., 3 miles S of Hughes Spring. Location.

Wilson Stubbs Oil Co.'s No. 1 Rowborts, 450 ft. from S line, 150 ft. from W line of 100-ac. tract, 2 miles SW of Jacksonville, J. D. Wolfin Sur.
S.D. 1,553 ft.

Wood et al's No. 4 New Birmingham Dev. Co., 750 ft. S and 150 ft. E line, 600 ft. N of No. 2.
Base Austin 5,170 ft.; cored to 5,182 ft.; showing sand; top sand 5,173 ft.; S.D. 5,182 ft.

Fannin County

B. F. Allen's No. 1-B Argo, center of 16½-ac. tract in J. G. Swisher Sur., 1 mile S of Ector.
S.D. 495 ft.

Warner Moore et al's No. 1 Hancock, 400 ft. from W and 150 ft. N lines, Sec. 16, L. M. Baldock Sur., ½ mile S of Trenton.
S.D. 170 ft.

Franklin County

Ferrell et al's No. 1 G. K. Ayers, C. H. Simms Sur., 900 ft. from N line and 5,500 ft. from W line of survey, 4 mi. NE of Winnsboro on 50-ac. tract.
Austin chalk 2,785-3,563 ft.; top Woodbine 4,292 ft.; drlg. 4,400 ft.

Freestone County

Hoover et al's No. 1 McFall, 150 ft. S and W lines, S. Garrison Sur., E of Mexia.
Derrick.

J. E. Milburn's No. 1 S. E. McShan, 4,000 ft. NW and 5,000 ft. NE of tract, 3 miles SE of Donie, G. Diaz Sur.
S.D. 270 ft.

Gregg County

O. T. Clark's No. 1 Williams, 2,100 ft. from S and 2,400 ft. from W of D. Hill Sur., 3 miles NE of Longview.
S.D. 3,710 ft.

L. P. Kean's No. 1 S. M. Smith, 1,000 ft. E and 1,250 ft. S of W. W. Avery Sur., 4 miles SE of Gladewater.
Rigged up.

Henderson County

Great State's No. 1 Ansley, 1,724 ft. W and 300 ft. S of SE cor. of M. Matthews Sur., N. H. T. Thompson Sur.
S.D. 2,315 ft.

Kirby Pet. Co.'s No. 1 C. L. Litchfield, 600 ft. N and 350 ft. W, I. Clendennen Sur.
Location.

C. D. Neff et al's No. 1 H. G. Small, 450 ft. from W and 375 ft. from E lines, I. Greeson Sur., SW of Crossroads.
Drlg. 2,960 ft. in Eagleford shale.

J. K. Wells' No. 1 W. E. Warren, 330 ft. out of NE cor. of Thos. Hanna Sur., 4 miles W of LaRue.
Location.

H. M. Wilson's No. 1 fee, 970 varas S of NE cor. of 942-ac. tract, 5 miles N of Malakoff.
Derrick.

Hopkins County

D. A. Hale et al's No. 1 L. M. Hall, 200 ft. from N and E lines of 70-ac. tract, 1 mile SE of Miller Bros. A. Caro Sur.
T.D. 2,950 ft.

Hunt County

J. F. Morrissey & Co., Inc.'s No. 1 Fry, 543 ft. from N and 200 ft. from E of 146-ac. tract, 7 miles N of Commerce, C. Davis Sur.
Skidded rig 30 ft. south; drlg. 1,820 ft.

H. G. Samson's No. 1 Phillips, 1,200 ft. E of Winan's No. 1 Phillips, University Lands Sur., 2 miles W of Commerce.
Elev. 522 ft.; top Woodbine 2,596 ft.; drlg. 3,170 ft.

Kaufman County

Germany et al's No. 1 Clark, 951 ft. N and 1,000 ft. W of tract, S. Eden Sur.
T.D. 1,780 ft.

Murry & Emerson's No. 1 G. W. Martin, 1,660 ft. from W and 250 ft. from N of 140-ac. tract, from W. L. C. Butler Sur., 2 miles NE of Kemp.
Drlg. 1,783 ft.

L. P. Kean's No. 1 J. B. Hunter, R. Sowell Sur., 300 ft. from SW and 150 ft. from SE of 50-ac. tract, 4 miles S of Terrell.
S.D. 3,400 ft.

Leon County

Killough & Tucker's No. 1 G. W. Lee, center of NE 10 acres of 230-ac. tract, J. Burleson Sur.
Elev. 393 ft.; S.D. 5,641 ft.; top Woodbine by Schlumberger 5,569 ft.

Limestone County

J. Edward Mills' No. 1 Hunt, 200 ft. from N. 350 ft. from W line 34.75-ac. tract, Israel Wood Sur., 2 miles NE of Kosse.
S.D. 3,654 ft.

Doughtry et al's No. 1 S. Welch, 150 ft. from NW and 900 ft. from NE of 77.64-acre tract in A. Varilia Sur., 4 miles W of Groesbeck.
Drlg. 3,115 ft.

J. P. McKinney et al's No. 1 N. B. Boyd, 200 ft. NE of Magnolia's No. 26 Sarah McAnulty Sur.
Drlg. 1,425 ft.

Y. Rogers' No. 1 J. M. Tidwell, 330 ft. from S and E of 230-ac. tract, P. Varella Sur., 3 miles SW of Mexia.
S.D. 810 ft.

Nacogdoches County

Morrow et al's No. 1 Mrs. J. J. Holton, 900 ft. from W and 1,200 ft. from S 50-ac. tract, B. Flores Sur., 5 miles E of Nacogdoches.
S.D. 712 ft.

Stebbinger & Baker, trustee's No. 1 Mrs. A. Mattauer, 408 ft. from W and 607 ft. from N of 440-ac. tract, R. Totin Sur., 4 miles SE of Cherino.
Drlg. 2,076 ft.

Navarro County

W. J. Keeling et al's No. 1 J. F. Rushing 484 ft. from N line and 150 ft. from W line of 184-ac. tract, 6 miles SW of Richardson, Henry Ford Sur.
T.D. 2,881 ft.

McCullough et al's No. 1 C. Berry, 330 ft. from SE cor. of 35-ac. tract, 1 mile W of Dawson, William Moss Sur.
S.D. 1,182 ft.

E. M. Thomason & Co.'s No. 1 C. Morgan, 340 ft. from W and 520 ft. from N of 100-ac. tract, Wm. Haggard Sur., 1 mile SW of McGlothlin's No. 1 Dobbin.
Drlg. 1,727 ft.

Wiggins et al's No. 1 Doncho, 450 ft. from N and 1,101 ft. from E lines in John Couple Sur., SW of Corsicana.
S.D. 1,439 ft.

Rains County

Allen & McClung's No. 1 Giles, T. Cunningham Sur., Abst. 143, 330 ft. from W line and 200 ft. from N line of 105-ac. Giles tract, 5 mi. SW of Emory.
Derrick.

Allen & McClung's No. 1 Ida Bullard, N. Brantely Sur., 1,300 ft. from W line and 200 ft. from N line of 25-ac. tract, 2 mi. SW of Emory.
Derrick.

Red River County

Joiner's No. 1 D. Rust, C. C. Wilborn Sur., 224 ft. N and 254 ft. W of most southerly SE cor. of Sur., just south of Avery.
Moving in rig.

Rusk County

Ben Lamb's No. 1 H. Leath, 330 ft. out of NW cor. of 185-ac. tract in L. J. Dooley.
T.D. 4,740 ft.; P.B. to 4,710 ft.

Richardson's No. 1 Wood.
T.D. 4,404 ft.

J. W. Shipman et al's No. 1 Citizens Natl. Bank, NE cor. of 125-ac. tract, J. J. Y'Barbo Sur., 4 miles NE of Henderson.
Rig.

Smith County

Bowers et al's No. 1 M. Landers, 330 ft. from S and E of 215-ac. tract, S.A.& M.G. Sur., 3 miles NE of Jamestown.
Pecan gap 3,000-3,200 ft.; S.D. 3,644 ft.

W. R. Harrison's No. 1 Kuening, J. Herring Sur. (O.W.D.D.)
S.D. 4,330 ft.

Titus County

S. Rotondi's No. 1 Lillianstun, 1,200 ft. E from NW cor. of J. Bodt Sur. and 330 ft. N, but in W. H. Crawford Sur., 5 miles NE of Talco.
Elev. 301 ft.; derrick.

Van Zandt County

J. H. Foster et al's No. 1 Breucher, 330 ft. out of SE cor. of tract, D. Clapp Sur., 4 miles SE of Wills Point.
T.D. 4,509 ft.; waiting on orders.

J. Beren et al's No. 1 Bryant, 483 ft. N of same operator's dry hole, Nacogdoches County School Land Sur.
S.D. 1,325 ft.

Beren et al's No. 2 Palmer, 544 ft. from S and 686 ft. from E of 69.5-ac. tract, Nacogdoches County School Land.
S.D. 1,324 ft.

Wood County

Atlatl Royalty Corp.'s No. 1 J. B. Goldsmith, W. W. Lanier Sur., Abst. No. 358, 486 ft. from W line and 566 ft. from N line of 693.3-ac. tract and survey, 3½ mi. NW of Quitman.
Top Woodbine 4,448 ft.; fishing 5,040 ft.

LA.-ARK. WILDCATS

(Rotary operations unless otherwise designated)

NORTH LOUISIANA

Avoyelles Parish

Bell Oil Co.'s No. 2 Thompson-Koltz, 450 ft. S, 350 ft. E, NW cor. Sec. 11-2n-5e.
Partly R.U. and S.D.

Southern Star Pet. Co.'s No. 1 O. G. Boyette, Sec. 28-3-5e.
S.D. for high wtr. 3,875 ft.

Bossier Parish

Bossier O. & G. Co.'s No. 3 Sherrill, 330 ft. N and W, SE cor. Sec. 13-19-12.
Drlg. 530 ft.

W. A. Kirkland's No. 1 Jarrett & McKeller, 330 ft. N and W, S cor. NW NW Sec. 3-21-13.
Coring 2,385 ft.

Leonard Co.'s No. 1 Pearson, 250 ft. S and E of C Sec. 22-21-14.
T.A. 2,421 ft.

Richpiane Oil Co.'s No. 1-A S. H. Bollinger, Sec. 22-22-13.
Arranging set csg. 2,840 ft.

R. L. Skidmore et al's No. 1 Davis, Sec. 12-18-13.
S.D. 1,817 ft.; rig repair.

Triangle Drlg. Co.'s No. 1-A State of La., Sec. 23-17-12, 1,000 ft. E, 2,640 ft. S, NW cor.
Drlg. 4,434 ft.

Caddo Parish

Nick Babare's No. 1 Gibbs, Sec. 16-20-15.
Comp.; pumping 20 bbls., 2,265 ft.

Babare and Ark.-La. Gas Co.'s No. 1 fee, NE cor. SE SE Sec. 16-20-15.
Set 6-in. 2,220 ft.

J. Ed Bailey, tr.'s No. 1 Hartzo, NW cor. NE NW Sec. 28-22-16.
S.D. 1,236 ft.

Barnsdall Oil Co.'s No. 2 School fee, SE cor. NW SE Sec. 16-20-15.
Tested S.W. 2,365 ft.; P.B. to 2,230 ft.

Cal-La. Devel. Co.'s No. 1 Glassell, NW NE Sec. 11-19-15.
Set 10-in. 40 ft.

Holly Oil Co.'s No. 1 Thigpen & Herold, Sec. 16-20-15.
Testing 2,283 ft.

Hillman et al's No. 1 J. S. Noel Est., NE NE Sec. 12-20-16.
Comp.; flowing 10 bbls., 1,514 ft.

F. D. Hyde's No. 1 Thigpen & Herold, 350 ft. S and E, C Sec. 5-15-15.
S.D. 430 ft.

A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SE Sec. 4-14-16.
Swbng. 2,712 ft.

Leonard Co.'s No. 1 M. A. Dickson, 1,650 ft. S, 1,260 ft. E, NW cor. Sec. 36-21-15.
W.O.S.R. 2,234 ft.

Leonard Co.'s No. 2 Green, SW SW Sec. 8-20-15.
Set 7-in. 785 ft.; bailing 801 ft.

Murray Oil Co.'s No. 2 Noel, 495 ft. S, 735 ft. E, NW cor. SW Sec. 15-20-15.
Rigging up.

Press & Lambert's No. 2 Hughes, 350 ft. N and W of C Sec. 15-20-15.
Set 10-in. 50 ft.; drlg. 80 ft.

Recovery Oil Co.'s No. 1 W. L. Sibley, Sec. 15-19-14.
Arranging to set csg. 2,448 ft.

J. T. Reese's No. 1 Waskom, 330 ft. S and W, NE cor. Sec. 30-19-16.
S.D. 1,030 ft.

Texas Co.'s No. 4 School fee, Sec. 16-20-15.
Drlg. 2,198 ft.

A. C. Scott et al's No. 1 Noel Est., 330 ft. S and E, NW cor. Sec. 22-20-15.
W.O.S.R. 2,261 ft.

Shreveport Oil Corp.'s No. 5-B Muslow, Sec. 4-20-15..
Set 10-in. 40 ft.

Shreveport Oil Corp.'s No. 5-B Muslow, 150 ft. S, 1,320 ft. E, NW cor. Sec. 9-20-15.
W.O.S.R. 2,174 ft.

Texas Co.'s No. 2 Thigpen, 300 ft. S and E, C Sec. 15-20-15.
Set 6-in. 2,182 ft.

Caldwell Parish

Critchell & Woods' No. 1 Kraft, 230 ft. N and W, SE cor. NW NE Sec. 18-11-3e.
Arranging set 6-in. 1,703 ft.; T.D. 1,716 ft.

G. D. Davis' No. 1 La.-Central Lbr. Co., Sec. 14-11-3e.
Washing to bottom 1,850 ft.

G. W. Zeigan et al's No. 1 La.-Central Lbr. Co., 175 ft. S and E, NW cor. SW SW Sec. 25-13-3e.
S.D. 569 ft.

Claiborne Parish

E. T. Oakes' No. 1 H. W. Patton Est., 660 ft. S and W, NE cor. Sec. 1-20-5w.
Set 12½-in. 654 ft.

Desoto Parish

E. B. Bird et al's No. 1 J. H. Johns, 330 ft. N and W, center Sec. 20-14-6.
S.D.; W.O. 2,630 ft.

DeSoto Pet. Co.'s No. 1 B. Y. Wemple, C S½ SE NE SW Sec. 14-12-11.
Arranging to set csg. 2,590 ft.

E. L. Foster's No. 1 Youngblood, Sec. 9-11-14.
Set 7-in. 2,735 ft.; T.D. 2,860 ft.

P. G. Fraley et al's No. 1 G. R. Stell, 330 ft. S and W, NE cor. Sec. 5-12-16.
R.U. and S.D.

Hunter Co.'s No. 1 DeSoto, 660 ft. S, 1,320 ft. E, NW cor. Sec. 29-12-14.
Set 10-in. 208 ft.

Leslie Prod. Co.'s No. 1 Ramsey, 150 ft. N and W of C Sec. 36-11-11.
Set 10-in. 45 ft.

National Oils, Inc.'s No. 1 B. Y. Wemple, NW SW Sec. 14-12-11.
S.D. 120 ft.

C. T. Ruffins' No. 1 Lee, 400 ft. S, 334 ft. E, NW cor. SW Sec. 33-14-13.
Testing 2,832 ft.

Ed Saffold et al's No. 1 Thigpen, 400 ft. S, and 308 ft. W, NE cor. SW NE Sec. 33-13-13.
W.O.S.R. 1,730 ft.

East Carroll Parish

Century Oil & Drlg. Co.'s No. 1 Olive Dell, 660 ft. S, 300 ft. W, NE cor. Sec. 56-21-21e.
Drlg. 1,510 ft.

LaSalle Parish

H. L. Hunt, Inc.'s No. 1-A King, 225 ft. S, 210 ft. E, NW cor. NE NW Sec. 36-10-1e.
Blowing S.W., 1,524 ft.

Madison Parish

San. Land & Exploration Co.'s No. 1 Delta Land Co., Sec. 1-17-12e.
Drlg. 1,100 ft.

Morehouse Parish

Carbon Consolidated's No. 2 Archie, 560 ft. S, 990 ft. E, NW cor. SW Sec. 22-20-4e.
Comp.; gauged 7,000,000 ft. gas, 2,135 ft.

J. H. Gibson, tr.'s No. 1 Thomas, 330 ft. S and W, NE cor. Sec. 16-22-7e.
Rigging up.

Zeiger & Bacon's No. 2 Crossett Lbr. Co., 3,870 ft. N, 505 ft. E, SE cor. SE SW of Sec. 36, in Sec. 41.
S.D. 50 ft.

Ouachita Parish

American Liberty Oil Co.'s No. 1 Golson, C NW Sec. 25-17-1e.
Drlg. 2,675 ft.

G. E. Gordon, tr.'s No. 4 Rea-Green, 1,078 ft. S, 1,122 ft. W, NE cor. SE Sec. 2-18-4e.
Testing 2,217 ft.

Pioneer Gas Co.'s No. 1 Filhoil, 2,436 ft. N,

307 ft. W, common cor. Sec. 11-18-4e.
S.D. 2,215 ft.

Natchitoches Parish

Clyde Crichton's No. 1 Friedman Est., 406 ft. N, 428 ft. E, SW cor. Sec. 52-7-6.
Arranging run Schlumberger 3,560 ft.
Ab Jones' No. 1 Brown Lbr. Co., 400 ft. N, 330 ft. W, SE cor. Sec. 5-10-10.
S.D. 1,033 ft.

Red River Parish

Sterling O. & R. Co.'s No. 1 Long Bell, Sec. 19-13-9.
S.W. and abd. 1,175 ft.
J. S. Tuffree's No. 1 Wilkinson, 1,320 ft. S and W, NE cor. Sec. 11-12-11.
S.D. 1,395 ft.

Sabine Parish

G. H. Collins' No. 1-C Cranford, 330 ft. S and E, NW cor. SW NW Sec. 28-9-13.
Tested S.W. 2,077 ft.
M. T. Hines' No. 1 J. B. Hill, SW NE Sec. 4-6-11.
Drlg. 2,700 ft.
Jack Lent's No. 1 Williams, Sec. 13-7-11.
S.D. 1,820 ft.
Lee Whitehurst et al's No. 1 Frost Ind., C SE SW Sec. 20-9-13.
Testing 1,645 ft.
Windsor Oil Co.'s No. 1 Latham, 375 ft. N, 330 ft. E, SW cor. SE SE Sec. 16-9-13.
Drlg. 1,575 ft.

Union Parish

Carbon Consolidated's No. 1 Feazel, 990 ft. S, 660 ft. E, C Sec. 8-20-3e.
Rigging up.
Crescent Drlg. Co.'s No. 1 Woolie, SE cor NW NW Sec. 34-19-1e.
S.D. 1,391 ft.
W. B. Inabnett's No. 1 fee, 417 ft. S, 838 ft. W, NE cor. NW Sec. 11-20-3e.
Comp.; 3,000,000 ft. gas, 2,177 ft.
Southern Prod. Co.'s No. 1 Clark, 500 ft. N and W, SE cor. NW NW Sec. 17-23-1e.
S.D. 2,296 ft.

ARKANSAS

Arkansas County

Grand Prairie Realty Co.'s No. 2 Fischer, 412 ft. S, 12 ft. W, NE cor. NW NW Sec. 6-6-4w.
W.O. csg. 118 ft.

Ashley County

Glenn E. McFaddin et al's No. 1 Boreine Farms, 660 ft. S and W, NE cor. Sec. 1-18-8.
S.D. 2,800 ft.

Columbia County

Southern States Gas Co.'s No. 1 Piney Woods Lbr. Co., 330 ft. N and E, SW cor. NE NW Sec. 10-20-22.
S.D. 960 ft.

Hempstead County

A. H. Bagnelle's No. 1 Trattner & Rhinehart, Sec. 2-13-26.
S.D. 1,992 ft.
F. W. Martin's No. 2 Lafferty, C NW Sec. 17-14-24.
Rigging up.

Jackson County

American Liberty Oil Co.'s No. 1 Lusk, C NE NE Sec. 1-16-1w.
Drlg. 2,675 ft.

Lafayette County

Kamon & Neely's No. 1 Cockran, NW cor. SE SW Sec. 26-19-25.
Coring 4,120 ft.

Miller County

M. D. K. Fitzwater's No. 1 E. H. Beck, 150 ft. N and E, SW cor. NW SW Sec. 34-15-26.
Testing 2,919 ft.
Fitzwater et al's No. 1 Norson, SW cor. SE SW Sec. 20-15-27.
S.D. 3,177 ft.
King Oil Corp.'s No. 1 C. H. Schroder, 200 ft. N, 330 ft. E, SW cor. SW NE Sec. 24-14-28.
S.D. 3,167 ft.
King Oil Corp.'s No. 1 Anderson, 350 ft. E, 200 ft. S, NE cor. SW NE Sec. 16-14-27.
S.D. 2,573 ft.
Magnolia Pet. Co.'s No. 8 Olivet, 336 ft. S and W, NE cor. NW NW Sec. 3-16-26.
Coring 2,944 ft.
Frank Roe et al's No. 1 Frost Est., 150 ft. N and W, SE cor. SE SW Sec. 8-15-26.
Set 10-in. 120 ft.
Lee Timberlake's No. 1 Frost Est., 330 ft. N and E, SW cor. SW SE Sec. 27-15-26.
Dry and abd. 3,100 ft.

Nevada County

Carnett et al's No. 1 Floyd Munin, C SW Sec. 16-14-22.
S.D. 50 ft.

Ouachita County

Walter Lown et al's No. 1 Arnold, Sec. 24-15-16.
S.W. and abd. 3,438 ft.
Snow Black Pet. Co.'s No. 1 O. F. Wyman, NW SW Sec. 36-11-16.
Coring 1,460 ft.

Sevier County

Gardy Drlg. Co.'s No. 1 Craig, Sec. 35-17-15.
Testing 2,211 ft.
Gulf Ref. Co.'s No. 49 L. Werner, 4,620 ft. N, 60 ft. E, SW cor. Sec. 5-16-16.
Coring 6,622 ft.
H. L. Hunt's No. 15 E. F. Gregory, 330 ft. N and W, SE cor. Sec. 10-17-14.
Arranging to blow with air, 3,478 ft.
H. L. Hunt's No. 18 E. F. Gregory, 330 ft. N and E, SW cor. Sec. 11-17-14.
Derrick.
Mrs. R. K. Jones et al's No 1 Davis, 330 ft. N and W, SE cor. NW NW Sec. 28-16-14.
S.D. 3,202 ft.
McCreslenn Oil Co.'s No. 2 Parker, 420 ft. W, 230 ft. N, SE cor. NE SE Sec. 3-18-13.
Comp.; pumping 20 bbls., 3,583 ft.
C. E. Murdock's No. 1 Pumphrey, C SW NW NE Sec. 11-17-14.
Derrick.
F. F. Roberts et al's No. 1 Galion Lbr. Co., 330 ft. S and E, NW cor. NW SE Sec. 10-16-14.
Set 10-in. 104 ft.

MISSISSIPPI

Amite County

Mineral Resources, Inc.'s No. 1 Anderson, C NE NW Sec. 14-3n-3e.
S.D. 550 ft.

Bolivar County

White & Jones' No. 1 Ballou, SE SE NW Sec. 17-24n-7w.
Drlg. 1,080 ft.

Clarke County

L. Beckwith et al's No. 1 Long Bell Lbr. Co., 538 ft. S, 125 ft. W of C Sec. 10-2n-16e.
T.A.; lack of funds.
Clarke County Oil Co.'s No. 1 Dora Butler, C SW SW Sec. 15-2n-16e.
Set 10-in. 63 ft.

Harrison County

Big Ridge Oil Co.'s No. 1 Hinzin, NE Sec. 13-7s-10w.
S.D.; W.O. 1,100 ft.

Lauderdale County

Bob Dalton's No. 1 Bounds, Sec. 34-7n-15e.
S.D.; W.O. 1,600 ft.

Monroe County

P. J. McAlpine's No. 1 Frank Rye, Sec. 15-15s-17w.
T.A. 2,931 ft.
P. J. McAlpine's No. 1 Crook, 1,090 ft. S, 90 ft. W, NE cor. Sec. 15-13s-13w.
Arranging set 6-in. 2,502 ft.

Rankin County

Cleve Love et al's No. 1 Ascher, 520 ft. S and E, NW cor. NE NE Sec. 18-5n-2e.
Drlg. 1,670 ft.

Simpson County

Berry Corp.'s No. 2 R. T. Berry, Sec. 33-2n-4e.
T.A. 2,510 ft.

Warren County

H. W. Elliott et al's No. 2 R. L. Parker, 780 ft. E, 1,570 ft. S, NW cor. Sec. 14-14n-1e.
S.D.; high wtr. 1,600 ft.

Washington County

Perkins & Dees' No. 1 Lee, 1,500 ft. E, 500 ft. N, SW cor. Sec. 33-15n-3w.
S.D. 2,175 ft.

Winston County

Jack Vale et al's No. 1 Moody, 713 ft. N, 667 ft. E, SW cor. NW SW Sec. 3-13n-14e.
Arranging set 6-in. 2,250 ft.

WEST TEXAS WILDCATS

Week Ending July 6

Andrews County

Crafton Oil Co.'s No. 1 Richard & McWhorter, C NE ¼ Sec. 13, Blk. A-30, 6 mi. SE of NW cor. of county.
Drlg. 875 ft.
Fuhrman Pet. Corp.'s No. 2 Ford, 440 ft. from S and 1,320 ft. from E, Sec. 16, Blk. A-43.
Fishing 4,047 ft.
Gulf Prod. Co.'s No. 1 J. S. Kelley, 1,320 ft. from S and E, Sec. 2, Blk. A-38.
Combination rotary and standard rig; drlg. 150 ft.
Honolulu & Llano Oil Co.'s No. 1-B Parker, 440 ft. from N and 1,650 ft. from E, Sec. 11, Blk. A-42.
Elev. 3,281 ft.; T.D. 4,804 ft.; 3,600 ft. fluid in hole; P.B. to shut off water.
Humble Oil & Ref. Co.'s No. 5 Means, 654 ft. from S and 677 ft. from W, Sec. 4, Blk. C-45, P.S.L. Sur.
Derrick.
Humble Oil & Ref. Co.'s No. 4 Means, 1,982 ft. from N and 660 ft. from E, Sec. 12, Blk. A-35.
Rigged up.
Humble Oil & Ref. Co.'s No. 4 Means, 654 ft. from S and 1,997 ft. from W, Sec. 4, Blk. C-45.
Elev. 3,185 ft.; T.D. 4,520 ft.; made 50 bbls. per hour.
Republic Prod. Co.'s No. 1 Boner-State, 3,200 ft. from S and 1,320 ft. from E, Sec. 25, Blk. A-43.
S.D. 4,007 ft.
Shell Pet. Corp.'s No. 1 J. S. Means, 660 ft. from S and 1,980 ft. from E lines of Sec. 2, Blk. A-35, P.S.L. Sur.
Cellar and pits.
L. G. Stogner et al's No. 1 Mrs. C. George, 660 ft. from S and E, Sec. 25, Blk. A-22, P.S.L. Sur.
Drlg. 167 ft.
J. W. Tripplehorn's No. 1 Ogden, 330 ft. from S and 2,310 ft. from W lines of Sec. 6, Blk. A-46, P.S.L. Sur.
Elev. 3,211 ft.; drlg. 3,175 ft.; show gas 2,930-35 ft.
Wahlenmaier et al's No. 1 Odessa Ranch Co., 1,320 ft. from N and E of Sec. 10, Blk. A-32, P.S.L. Sur.
Elev. 3,307 ft.; T.D. 4,807 ft.; S.D. for orders; no water.
Wahlenmaier et al's No. 1 Cox Estate, 1,320 ft. from N and W of Sec. 8, Blk. A-33.
T.D. 157 ft.; rotary rig.

Brewster County

F. C. Dodson's No. 1 Texas American Syndicate, 660 ft. from N and E, Sec. 66, Blk. 10, G.H.&S.A. Sur.
Elev. 3,228 ft.; S.D. 950 ft.; rigged up rotary.
Joiner et al's No. 1 McIntyre, 353 ft. from S, 2,390 ft. from E of Sec. 21, Blk. 352, W. M. Mitchell Sur.
S.D. 2,150 ft.
King & Franklin's No. 1 Gage Est., C Sec. 138, Blk. 22, G.H.&S.A. Sur.
Elev. 4,244 ft.; S.D. 1,185 ft.
G. H. Storey's No. 1 Wilson, 1,980 ft. from N and E lines of Sec. 3, Blk. 212, T.&St. L. Sur.
Elev. 3,609 ft.; drlg. 1,805 ft.
S. G. Smith's No. 1 Decie, 2,490 ft. from S and E, Sec. 7, Blk. 1.
Elev. 4,271 ft.; drlg. 1,180 ft.

Cochran County

Kelsey's No. 1 Slaughter, C Labour 36, League 150, R.C.S. Lands.
Derrick.
West Texas Development Co.'s No. 1 Slaughter, near C of Labour 52, League 149, Randall Co. School Lands.
S.D. 100 ft.

Coke County

Haggerty et al's No. 1 Gaston, 340 ft. from S and 654 ft. from W, Sec. 11, Jos. Young Sur.
S.D. 3,120 ft.

Concho County

Maverick Oil Co.'s No. 1 Jim Rice, 330 ft. from S and W lines of NW ¼ of Sec. 18, S.N. Ry. Sur.
Location.

Crane County

American Liberty Oil Co.'s No. 1 Tubb, 796 ft. from S and 330 ft. from W, Sec. 11, Blk. B-27, P.S.L. Sur.
Elev. 2,536 ft.; fishing 3,702 ft.
Dobbs Oil Co.'s No. 1 J. Cowden et al, 330 ft. from S and E of N half, Sec. 35, Blk. 1, H.&T.C. Sur.
S.D. 205 ft.
Gulf Prod. Co.'s No. 10 Waddell, C NW ¼ Sec. 11, Blk. B-23.
Elev. 2,775 ft.; drlg. 2,890 ft.
Gulf Prod. Co.'s No. 1 Henderson, 1,313 ft. from S and 1,322 ft. from E, Sec. 3, Blk. B-23, P.S.L. Sur.
Elev. 2,778 ft.; flowed 14 bbls. in 24 hrs.; fishing 2,458 ft.
Gulf Prod. Co.'s No. 1 M. B. McKnight, 660 ft. from S and W, Sec. 9, Blk. B-21.
Elev. 2,778 ft.; T.D. 3,713 ft.; pumped 50 bbls. oil and 50 bbls. water in 12 hrs.
Gulf Prod. Co.'s No. 1 Waddell, C NW NW Sec. 4, Blk. B-27, P.S.L. Sur.
Drlg. 4,631 ft.
H. L. Holloway's No. 1 Mayberry, 2,440 ft. from SW and SE, Sec. 17, Blk. 35, H.& T.C. Sur.
S.D. 570 ft.
Magnolia Pet. Co.'s No. 1 Edwards, 330 ft. from S and 1,650 ft. from E, Sec. 2, Blk. B-23.
Elev. 2,778 ft.; 2,000 ft. oil in hole; drlg. 3,298 ft.

Crockett County

Adkins Bros.' No. 1 Shannon, 320 ft. from S and 630 ft. from W of 80 in SW ¼ Sec. 27, Blk. WX, G.C.&S.F. Surs.
Machine.
Leslie-Hiller et al's No. 1 Todd, 1,200 ft. N and 330 ft. E, Sec. 36, Blk. WX, G.C.& S.F. Sur.
Fishing 820 ft.
Humble Oil & Ref. Co.'s No. 1 Couch, C NW Sec. 3, Blk. QR, G.C.&S.F. Sur.
Elev. 2,538 ft.; temp. abnd. 1,881 ft.

Culberson County

Anderson-Prichard Oil Corp., Magnolia Pet. Co. et al's No. 1 Borders, 1,255 ft. N and 2,305 ft. from W, Sec. 34, Blk. 69, P.S.L. Sur.
Straightening hole; T.D. 1,667 ft.
Miller Bros.' No. 1 fee, 1,900 ft. from N and 660 ft. from E line of Sec. 21, Blk. 97, P.S.L. Sur.
S.D. 2,137 ft.

Dawson County

Adams & Turner's No. 1 John Robinson, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 46, Blk. M, E.L.R.R. Sur.
Fishing 4,860 ft.
O. F. Dickinson, trustee's No. 1 C. H. Doaks, 368 ft. from S and 330 ft. from E of SW cor., Sec. 4, Blk. H, E.L. Ry. Co. Sur.
S.D. 265 ft.

Ector County

Atlantic Oil Prod. Co.'s No. 1 T. P. Land Trust, 440 ft. from N and W of SE Sec. 11, Blk. 43, Twp. 1s, T.&P. Sur.
T.D. 4,391 ft.; P.B. to 4,255 ft.; testing; will not flow.
Continental Oil Co.'s No. 1 Wight, 2,200 ft. from S and W, Sec. 21, Blk. 43, Twp. 1s, T.&P. Sur.
Drlg. 105 ft.
Empire Gas & Fuel Co.'s No. 1 Cummins, 440 ft. from S and E, Sec. 10, Blk. 45, Twp. 1n, T.&P. Sur.
2,000,000 ft. gas; fishing 4,130 ft.
Eppenauer Drlg. Co. et al's No. 1 Wight, 440 ft. from N and W of NE ¼ Sec. 22, Blk. 43, Twp. 1s, T.&P. Sur.
Drlg. 1,054 ft.
Landreth Prod. Co.'s No. 1-B Blakeney, 440 ft. from S and W, Sec. 22, Blk. 44, Twp. 1n, T.&P. Sur.
Elev. 3,172 ft.; drlg. 3,935 ft.
Landreth Prod. Co.'s No. 1 Blakeney, 440 ft. from N and E, Sec. 28, Blk. 43, Twp. 1n, T.&P. Sur.
Elev. 3,066 ft.; drlg. 2,740 ft.
Landreth Prod. Co.'s No. 2 Scharbauer, 2,200 ft. from N and 440 ft. from W, Sec. 13, Blk. A, P.S.L. Sur.
Elev. 3,142 ft.; 1,500,000 ft. gas 4,060-65 ft.; drlg. 4,101 ft.
C. L. Peters' No. 1 Connell, 330 ft. from N and E lines of NW of Sec. 12, Blk. B-16, P.S.L. Sur.
Drlg. 3,280 ft.
Phillips Pet. Co. and Pure's No. 1 C. Cowden, 2,200 ft. from N and 440 ft. from W, Sec. 14, Blk. 44, Twp. 1s, T.&P. Sur.
Elev. 3,100 ft.; fishing 3,285 ft.
Phillips Pet. Co. and Pure Oil Co.'s No. 2 C. Cowden, 440 ft. from S and W, Sec. 23, Blk. 44, Twp. 1s, T.&P. Sur.
Drlg. 2,637 ft.

El Paso County

Tri-State Oil Co.'s No. 1 Kinkel, 190 ft. from N and 550 ft. from E, Sec. 227, A.T.&S.F. Sur.
S.D. 535 ft.

Fisher County

George Callihan et al's No. 1 Herring, 2,310 ft. from S and 330 ft. from W lines of Sec. 192, Blk. 1, B.B.B.&C. Sur.
Elev. 1,804 ft.; T.D. 3,126 ft.; testing after treating.
Tide Water Oil Co. et al's No. 1 W. E. Hittson et al, 1,320 ft. from N and 660 ft. from W, Sec. 177, Blk. 2, H.&T.C. Sur.
Elev. 1,871 ft.; drlg. 2,965 ft.

Garza County

N. L. Richards' No. 1 Sullivan, 330 ft. from N and W, Sec. 3, Blk. 5, K. Aycock Sur.
Elev. 2,534 ft.; drlg. 2,942 ft.

Glasscock County

John I. Moore et al's No. 1 J. S. McDowell, 1,980 ft. from N line and 660 ft. from E line of Sec. 22, Blk. 34, Twp. 2s, T.&P. Sur.
Topped lime 9,471 ft.; show oil and gas 9,484-9,520 ft.; increase oil 9,594-9,600 ft. and 9,633-55 ft.; T.D. 9,946 ft.

Howard County

Eastland Oil Co.'s No. 1 D. H. Snyder, SW cor. Sec. 28, Blk. 30, Twp. 1s, T.&P. Sur.
Machine.
John I. Moore et al's No. 1 Snyder, 330 ft. from S and W, Sec. 28, Blk. 30, Twp. 1s, T.&P. Sur.
Elev. 2,302 ft.; drlg. 2,273 ft.
Texas Co.'s No. 16 Schalk, W half Sec. 18, Blk. 19, Lavaca Navigation Co. lands.
Drlg. 1,700 ft.
Wooten's No. 1 Blank, NW ¼ Sec. 46, Blk. 30, Twp. 1n, T.&P. Sur.
Drlg. 2,615 ft.

Jeff Davis County

C. M. Joiner's No. 1 Jones & Coffield, 770 ft. from N and 1,322 ft. from E, Sec. 8, Blk. 3, H.&T.C. Sur.
Drlg. 1,410 ft.

Jones County

Campbell et al's No. 1 Rowell, in E half of W half, Sec. 6, T.&P. Sur.
S.D. 1,900 ft.
R. L. Crawford's No. 1 Wattzer, 200 ft. from S and W, Sec. 1, T.&N.O. Sur.
Location.
Condor Pet. Co.'s No. 1 Asa Holt, 200 ft. from S and E lines of Sec. 2, Blk. 20, T.&P. Sur.
Spudded.
Davenport & Hughes' No. 1 J. D. Farrell, 1,100 ft. from N and 1,540 ft. from E, Sec. 6, Blk. 15, T.&P. Sur.
Drlg. 85 ft.
A. B. Farris et al's No. 1 J. W. Jennings, 1,980 ft. from S and 660 ft. from E, Sec. 207, B.B.B.&C. Sur.
Drlg. 1,750 ft.
Moutray & King's No 1 R. Prichard, 400 ft. from N and 200 ft. from W, Subd. 1, G. Martines Sur., 5 miles N of Hawley.
T.D. 2,103 ft.; testing; est. 12 bbls. per day.
Sandy Ridge Oil Co.'s No. 3 Jones, 1,520 ft. from N and 660 ft. from W, Sec. 5, Blk. 15, T.&P. Sur.
Location.

Kimble County

Wilcox Oil & Gas Co.'s No. 1 J. Patterson, 200 ft. from N and E, Sec. 1, D.&P.R.R. Sur.
Drlg. 1,015 ft.

Loving County

D. C. Evans' No. 1 W. D. Johnson, 2,310 ft. from N and 1,650 ft. from W, Sec. 12, Blk. 57, Twp. 1, T.&P. Sur.
S.D. 3,170 ft.
Mason Oil Co.'s No. 1 Kyle, 1,980 ft. from S and E, Sec. 22, Blk. 55, Twp. 1, T.&P. Sur.
T.D. 2,640 ft.; S.D. for orders.

Lynn County

Hart Oil Co.'s No. 1 Edwards, 220 ft. from N and 200 ft. from W of SE Sec. 29, L.&S.V. Sur.
Elev. 3,112 ft.; S.D. 4,817 ft.

Martin County

Wright & Scott's No. 1 Flannigan, 330 ft. N and E, Sec. 22, Blk. 37, Twp. 1s, T.&P. Sur.
S.D. 100 ft. for csg.

McCulloch County

Paulter et al's No. 2 Wyres, 50 ft. from S

and 160 ft. from W, P. W. Rocins Sur. Material.

Mitchell County

Sawtell & Grueber's No. 1 Morrison. T.D. 1,845 ft.

Texas Co.'s No. 1 Terry, 300 ft. from S and 1,650 ft. from E of W 485 acres, Sec. 62, Blk. 29, W.&N.W. Sur. Drlg. 1,750 ft.

Pecos County

Adams et al's No. 2 Masterson, 1,630 ft. from SE and 330 ft. from SW, Sec. 104, Blk. 10, H.&G.N. Sur. S.D. 1,075 ft.

Gulf Prod. Co.'s No. 6 White & Baker, 330 ft. from N and W, Sec. 94, Blk. 194. Elev. 2,847 ft.; abnd. 1,792 ft.

W. Hicks' No. 1 Fromme, 1,980 ft. from NE and 2,310 ft. from SE, Sec. 106, Blk. 10, H.&G.N. Sur. Location.

C. R. Richards' No. 4 Courtney, 920 ft. from N and W, Sec. 78, Blk. OW, 360 ft. S of No. 2. Elev. 2,967 ft.; S.D. 362 ft.

Samwan Oil Co.'s No. 2 Masterson, 330 ft. from W and 990 ft. from S lines of Sec. 104, Blk. 10, H.&G.N. Sur. S.D. 1,240 ft.

Trans-Tex. Oil Co.'s No. 1 Caldwell, 330 ft. from E line and 330 ft. from S line of Sec. 27, Blk. 40, Twp. 9, T.&P. Sur. S.D. 2,412 ft.

Reagan County

Dobbs' No. 1 Friend, 2,310 ft. from S and 660 ft. from W of Blk. 3, Wm. Allen Sur., 3 or 4 miles S of Big Lake. S.D. 2,464 ft.; P.B. to 2,459 ft.; 900 ft. oil in hole.

Skelly Oil Co.'s No. 1-D H. S. Grayson, 1,980 ft. from N line and 660 ft. from W line of Sec. 33, Blk. 3, University Land Sur. S.D. 2,967 ft.; bridged back to 3,275 ft.

Reeves County

Dunigan's No. 1 Davis, 330 ft. from N and W, Sec. 7, Blk. 58, P.S.L. Sur. Location.

Herbert Oil Co.'s No. 1 Williams & Walker, 5,280 ft. from S and 1,320 ft. from E, Sec. 17, Blk. 6, H.&G.N. Sur. Elev. 2,536 ft.; T.D. 3,268 ft.; standardizing.

K. Slack et al's No. 1 Reeves, C NW ¼ Sec. 20, Blk. 56, P.S.L. Sur., 22 mi. N of Toyah. Top Rustler 805 ft.; S.D. 837 ft.

Washington Oil Co.'s No. 1 J. M. Radford Grocery Co., 2,640 ft. from S and 340 ft. from E, Sec. 39, Blk. 56, P.S.L. Sur. T.D. 502 ft.; to set csg.

Runnels County

Dennis et al's No. 1 Wash, 550 ft. from N and 560 ft. from E of W half, Sec. 123, E.T.R.R. Sur. S.D. 50 ft.

Melrose Oil Co.'s No. 1 L. P. Woods, 150 ft. from NE lines and 3,475 ft. from W line of survey, Willett Holmes Sur. No. 100. S.D. 2,507 ft.

R. Wells' No. 1 James, 396 ft. from N and 330 ft. from E of James tract in Sec. 16, D. Diaz Sur. Drlg. 2,371 ft.

Wolverton's No. 1 Willingham, 200 ft. from river and in C of Wilhelm-Wolfgang Sur. No. 425, 1½ mi. SE of Ballinger. T.D. 1,403 ft.; U.R. 10-in. csg.

Schleicher County

John M. Cooper et al's No. 1 Bert Page, 1,290 ft. from N line, 1,470 ft. from W line of Sec. 40, Blk. L, G.H.&S.A. Sur. Drlg 6,201 ft.

W. C. Proctor et al's No. 1 Judkins & Spencer, C SW ¼ Sec. 4, Blk. V-28. S.D. 680 ft.

Scurry County

Coffield & Guthrie's No. 1 Wade, 990 ft. from N and 330 ft. from W, Sec. 115, Blk. 97, H.&T.C. Sur. Location.

M. L. Goos et al's No. 1 J. E. Murphy, 330 ft. from N and 1,650 ft. from E, Sec. 114, Blk. 97, H.&T.C. Sur. Elev. 2,287 ft.; fishing 1,835 ft.; 400 ft. oil in hole.

Magnolia Pet. Co.'s No. 1 J. W. Mooar, 1,630 ft. from N and 990 ft. from E, Sec. 342, Blk. 97, H.&T.C. Sur. Elev. 2,516 ft.; drlg. 1,790 ft.

Stonewall County

Barnsdall Oil Co.'s No. 1 S. Young, 350 ft. from N and E, Sec. 26, Austin & Williams Sur. 349. Elev. 1,726 ft.; drlg. 3,064 ft.

Sutton County

Paul C. Teas' No. 1 G. S. Allison, 660 ft. from S and W, Sec. 49, Blk. A, G.W.T. &P. Sur. Location.

Taylor County

Anderson et al's No. 1 J. C. High, 2,310 ft. from N and 990 ft. from E, Sec. 8, L.&L. Sur. Rigged up machine.

Skaggs & Brewer's No. 1 McClure, 330 ft. from N and E, S half SW Sec. 8, L.A.L. Sur. T.D. 1,605 ft.; U.R.

Tom Green County

Twin Oil Co.'s No. 1 W. E. Green, 1,050 ft. from N and 1,400 ft. from W, L. P. Moore Sur. 169½. S.D. 315 ft.

Upton County

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W, Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. Sur. T.D. 12,786 ft.; P.B. to 9,977 ft.; treated with 3,000 gals. acid; swabbed 147 bbls. oil and 67 bbls. water in 18 hrs.

Humble Oil & Ref. Co.'s No. 1 Pollock, C of NW, Sec. 4, Blk. M. Drlg. 7,175 ft.

J. G. McKenzie's No. 1 Taylor, 1,650 ft. from S and 330 ft. from E lines of Sec. 22, Blk. B-2, G.H.&S.F. Sur. Location.

Williams & Williams Drlg. Co.'s No. 1 Robbins, 1,600 ft. from S and 1,900 ft. from E, Sec. 4, G.C.&S.F. Sur. T.D. 2,080 ft.; running tubing.

Ward County

Alexander's No. 1 Richter, 1,650 ft. from NW, 1,170 ft. from NE line of Sec. 27, Blk. 34, H.&T.C. Sur. S.D. 2,389 ft.

Bradford et al's No. 1 E. R. Allen, 660 ft. from NW line and 551 ft. from NE line, Sec. 11, Blk. 5, H.&T.C. Sur. T.D. 1,520 ft.; trying to drive csg.

California Co.'s No. 1 Walling & Costley, 2,310 ft from SE and 330 ft. from NE lines of Sec. 18, Blk. 34, H.&T.C. Sur. Cellar.

Caprito's No. 1 Hardage & Wilson, 2,310 ft. from NE and 990 ft. from SE, Sec. 11, Blk. 34, H.&T.C. Sur. S.D. 1,920 ft. for repairs.

Eastland Oil Co.'s No. 1 Johnson, 330 ft. NW and NE, Sec. 24, Blk. 34, H.&T.C. Sur. Drlg. 370 ft.

Eastland Oil Co.'s No. 1 C. D. Mason, 330 ft. from SW and SE, Sec. 14, Blk. 34. Drlg. 2,200 ft.

Gulf Prod. Co.'s No. 58 O'Brien, 330 ft. from E and 1,650 ft. from S, Sec. 18, Blk. F. Drlg. 2,710 ft.; oil from 2,700-2,710 ft.

Magnolia Pet. Co.'s No. 2 Sealy Estate, 2,310 ft. from S and 330 ft. from W, Sec. 42, Blk. F. T.D. 2,040 ft.; 600 ft. water in hole.

Skelly Oil Co.'s No. 1 Citizens Natl. Bank, 330 ft. from SE and SW lines of Sec. 40, Blk. 34, H.&T.C. Sur. Location.

Jerry Sines' No. 1 Brown, 330 ft. from NW and NE, Sec. 13, Blk. 5, H.&T.C. Sur. T.D. 3,148 ft.; P.B. 3,075 ft.; S.D.

Tex-Mex Pet. Co.'s No. 1 Potts, 2,310 ft. from SE and 990 ft. from SW lines of Sec. 28, Blk. B-29, P.S.L. Sur. Moving in material.

West Texas O. & R. Co.'s No. 1-C University, 330 ft. from N and E, Sec. 6, Blk. 16. T.D. 2,668 ft.; P.B. 2,567 ft.; swabbed 1,000 bbls. oil and 560 bbls. water in 14 days.

Winkler County

Barnsdall Oil Co.'s No. 1 Brown & Altman, 2,310 ft. from S and E, Sec. 6, Blk. B-5. Elev. 2,844 ft.; T.D. 3,218 ft.; P.B. to 3,195 ft.; est. 5 bbls. per hour.

Emperor Oil Co.'s No. 1 Halley, 1,650 ft. from S and 330 ft. from E, Sec. 12, Blk. B-12. Elev. 2,764 ft.; drlg. 1,422 ft.

Fox & Butler's No. 1 Brown & Altman, 2,310 ft. from S and 1,650 ft. from E, Sec. 6, Blk. B-5. Elev. 2,847 ft.; fishing 2,584 ft.

Gulf Prod. Co.'s No. 1 Keystone Cattle Co., NE of NW, Sec. 10, Blk. B-3, P.S.L. Sur. Elev. 2,942 ft.; T.D. 3,199 ft.; at 3,198 ft. guaged 3,000,000 ft. gas.

Gulf Prod. Co.'s No. 2 Keystone Cattle Co., NW cor. Sec. 17, Blk. B-2. Elev. 2,951 ft.; coring 3,558 ft.

Gulf Prod. Co.'s No. 3 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 11, Blk. B-3. Drlg. 3,131 ft.

Gulf Prod. Co.'s No. 4 Keystone Cattle Co., 330 ft. from N and E, Sec. 20, Blk. B-3. Drlg. 2,794 ft.

Gulf Prod. Co.'s No. 5 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 6, Blk. B-2. Elev. 2,952 ft.; drlg. 2,918 ft.

Gulf Prod. Co.'s No. 6 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 16, Blk. B-2. Elev. 2,950 ft.; drlg. 2,985 ft.

Gulf Prod. Co.'s No. 7 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 14, Blk. B-2. Elev. 2,954 ft.; rigged up.

Gulf Prod. Co.'s No. 8 Keystone Cattle Co., 330 ft. from S and W of Sec. 13, Blk. B-2. Elev. 2,964 ft.; rigged up.

Gulf Prod. Co.'s No. 9 Keystone Cattle Co., 330 ft. from S and W of Sec. 18, Blk. B-2. Elev. 2,946 ft.; rig.

Harry Adams' No. 2 Scarborough, 990 ft. from N line and 990 ft. from W line, Sec. 2, Blk. 77, P.S.L. Sur. Drlg. 1,225 ft.

Humble Oil & Ref. Co.'s No. 2-A Walton, 660 ft. from S and W, Sec. 48, Blk. 26, Derrick.

K-D Oil Co.'s No. 1 P. Mitchell, 1,650 ft. from N and 2,310 ft. from E, Sec. 23, Blk. B-10, P.S.L. Sur. Location.

J. C. Maxwell's No. 1 Brown & Altman, 2,310 ft. from N and 990 ft. from W, Sec. 6, Blk. B-5. Elev. 2,844 ft.; fishing 2,597 ft.

Mid-Continent Pet. Corp.'s No. 2 Howe, 1,650 ft. from N and 330 ft. from W, Sec. 12, Blk. 26. T.D. 2,989 ft.; P.B. 2,690 ft.; waiting on cement.

Richardson's No. 1 Walton, 1,010 ft. from S and 330 ft. from W, Sec. 1, Blk. B-3. Drlg 3,379 ft.; S.O. 3,379 ft. and 3,279-3,320 ft.

Skelly Oil Co.'s No. 2 Halley, 1,320 ft. from N and 2,200 ft. from E, Sec. 25, Blk. B-11, P.S.L. Sur. S.D. 3,090 ft.

Skelly Oil Co.'s No. 3 Halley, 2,200 ft. from N and 1,320 ft. from E, Sec. 25, Blk. B-11. Rotary rigged up.

Sioux Oil Co.'s No. 1 Lowett, 330 ft. from N and E, Sec. 36, Blk. 26, P.S.L. Sur. Fishing 2,727 ft.

Sun Oil Co.'s No. 1 Halley, 2,200 ft. from N and 440 ft. from E, Sec. 24, Blk. B-12, P.S.L. Sur. T.D. 3,170 ft.; P.B. 2,732 ft.; S.D. 2,732 ft.

Weaver et al's No. 1 T. Morton, 330 ft. from S and E of N half, Sec. 11, Blk. B-12. Elev. 2,767 ft.; S.D. 2,538 ft. for orders.

Yoakum County

C. J. Davidson et al's No. 1 Bennett ,1,320 ft. from N and E, Sec. 678, John H. Gibson Sur. Drlg. 2,424 ft.

Texas Panhandle Wildcats

Week Ending July 6

Gray County

Bell O. & G. Co.'s No. 1 Furneaux, 434 ft. from S and E lines of SE¼ of Sec. 110, Blk. B-2, H.&G.N. Sur. T.D. 3,120 ft.; bailing oil.

Clark & Smith's No. 1-B Short, 126 ft. from N and 330 ft. from E of NW 40 acres, Sec. 2, Blk. 1, H.&G.N. Sur.

Drilling Exploration Co.'s No. 1 Lapold, 330 ft. S and W, Sec. 141, Blk. 3, I.& G.N. Sur. Material.

Tom Doswell's No. 1 Herndon, 330 ft. from S and W lines of SE¼ of SW¼ of Sec. 166, Blk. 3, I.&G.N. Sur.

Farlins et al's No. 1 Ball, 330 ft. from S and E lines of NW¼ of Sec. 6, Blk. 3, B.B. Sur. S.D. 1,844 ft.

Hagy et al's No. 1 Chadwick, 320 ft. N and E. Sec. 210, Blk. B-21, H.&G.N. Sur. Drlg. 2,420 ft.

Harry Foster's No. 1 Johnson, 330 ft. from N and E lines of Sec. 21, L. L. Erwin Sur. Spudded and S.D.

Warner's No. 1 Taylor, 330 ft. N and W of SE¼ Sec. 8, Blk. 8, A. W. Wallace Sur. T. D. 3,116 ft.; swabbed 106 bbls. in 24 hrs.

McLaughlin et al's No. 1 Baggerman, 330 ft. from S and E of NW¼ Sec. 64, Blk. 3, I.&G.N. Sur. Rig.

McLaughlin et al's No. 1 Saunders, 330 ft. from S and 345 ft. from W lines of S½ of NE¼ and Sec. 3, Blk. 1, B.S.&F. Sur. T.D. 2,918 ft.; top pay 2,885 ft.; swabbed 117 bbls. in 17 hrs.

Plains Holding Co.'s No. 1 Morse-Gulf 330 ft. S and W, Sec. 57, Blk. 25, H.&G.N. Sur. Material.

Vulcan Oil Corp.'s No. 1-A Kinnard, 1,180 ft. from N and 150 ft. from W lines of E½ of SW¼ of Sec. 41, Blk. 25, H.&G.N. Sur. T.D. 2,533 ft.; C.O.

Hutchinson County

Barnsdall Oil Co.'s No. 1 Lewis, 330 ft. N and E of W½ of E½, Sec. 7, Blk. 23, B.S.&F. Sur. Drlg. 912 ft.

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QUESTIONS ON TECHNOLOGY

By Charles K. Francis, Ph. D., Technical Editor

Gum in Gasolines—Testing Methods and Permissible Content

I am interested in learning about gum in gasoline so am writing for information or references that will enable me to learn as much as possible to be a help in marketing. A review of your department through the recent issues brought out your articles in January 3 and May 9 issues, but if you can give more information it will be much appreciated. I would like to have a description of the tests for preformed and potential gum and would also appreciate authentic material as to the effect of gum on motors.—S. O. C.

Gasoline is consumed in most instances within a short time after delivery but there are conditions under which it may be held in storage for several years, so it is important to know the gum content at the time it is received and also to predict how much it may contain at the end of a long storage period. The gum contained in a sample of gasoline at the time of the first analysis is called preformed gum and the maximum quantity that is estimated will be formed in it after an extended period is termed potential gum.

The test most extensively used for the determination of preformed gum is by evaporation of 100 cc. in a copper dish and weighing the residue. The weight is reported in milligrams per 100 cc. There are some objections to this method, which is not considered suitable for reference purposes, but it appears to be satisfactory to many refiners for routine and control tests.

The American Society for Testing Materials tentative method requires that 50 ml. of the gasoline shall be evaporated in a glass beaker with the assistance of an air blast. The gum residue is reported in mgm. per 100 ml.

When 100 cc. are used in the copper dish method it may be that during the time required to reduce this volume gum may be increased through catalytic action of the copper. Some laboratories reduce this possible oxidation by evaporating only 20 cc. The quantity evaporated does not seem to influence the percentage of gum. The test may be simplified by the substitution of a glass evaporating dish in which 20 cc. are evaporated over a boiling steam bath.

The method extensively used for estimating potential gum is based on the method described by Voorhees and Eisinger as the oxygen gum test.

"The test is carried out in the following manner: Five hundred cubic centimeter round bottom, long necked Pyrex flasks are carefully cleaned with acid and distilled water and dried by heating and aspirating. After filling with oxygen, the sample is run in from a 25 cc. pipette. Since pressure is developed on heating, it is necessary to close the flask with a rubber stopper tied on. The flasks are placed in an actively boiling steam bath, allowing only the necks and stoppers to protrude. After exactly five hours' heating, they are cooled and the contents transferred to dishes and evaporated in the steam oven. It is necessary to rinse the flasks to transfer precipitated gum. For this purpose a mixture of benzene and alcohol has been found suitable, as it is an excellent solvent and has no effect on the subsequent evaporation. Stable gasolines have given from 2 to 10 milligrams of gum by this test (8-40 mg. per 100 cc.), whereas unstable stocks have given as high as 500 milligrams of gum."

Excessive gum in a motor fuel results in poor engine performance and may cause entire failure through the varnish-like gum depositing within the feed system, the carburetor, the inlet valves, seats and guides.

The limits for gum in a motor gasoline were tentatively set by Voorhees and Eisinger at 10 mgm. per 100 cc. but we know of gasolines having between 30 and 50 mgm. which give no trouble. There are so many factors involved that it has been impossible for the authorities to make the required study to enable them to determine just what quantity should represent the maximum permissible gum content for motor gasoline.

References: Murphy and Wirth, The Oil and Gas Journal, March 23, 1933, page 24; A.S.T.M. Standards on Petroleum Products, September, 1934, page 171; Voorhees and Eisinger, Amer. Pet. Inst., Chicago, December, 1928, reported in The Oil and Gas Journal, December 20, 1928, page 152.

> Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit problems to Dr. C. K. Francis. Questions should give as much detail as possible. Inquiries must be signed but only the given initials will be printed. The source of questions is considered confidential. Questions requiring discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered

Standards For Bottles to Be Used For Sale of Lubricating Oils

What are the Government specifications for bottles used for delivering lubricating oil? What department is in charge of such specifications?—B. E. S.

The twenty-fourth annual Conference on Weights and Measures, 1931, specified the type of bottle to be used for the sale of lubricating oil for delivery to the motor vehicle. The following is outlined from the details published in The Oil and Gas Journal, July 23, 1931, page 95.

Lubricating oil bottles for the sale of oil for immediate delivery to the crankcase of a motor vehicle shall meet these specifications: Shall be of uncolored glass; the indicated containing capacity at 68° F. shown on the side; manufacturer identified by suitable marks on the bottom; the portion of the bottle above the capacity line shall be at least 3 cubic inches with a minimum of one-fourth inch clear space between the capacity line and any opaque top.

The capacity of the bottle shall be correct within the permitted tolerance when tested with water the meniscus coincides with the bottom of the capacity line. Unobstructed drainage shall be provided.

All markings or graduations required by the provisions of these specifications shall be blown or otherwise permanently marked in or on the lubricating oil bottle, and shall be clear and distinct.

Tolerances. — The tolerances to be allowed on lubricating-oil bottles shall be in excess only and shall be the values shown in the following table. There shall be no tolerance allowed in deficiency.

Capacity of bottle—	Tolerance— Drams	Cu. in.
2 quarts	12	2.7
1 quart	8	1.8
1 pint	6	1.4

These recommendations were made by the U. S. Bureau of Standards for adoption by the several states.

Trichlorethylene Solvent for Wax Removal from Lubricants

I wish to know what is the liquid known as Tri which is reported to be used for treating lubricating oils. Could you tell me how it is used?—E. S. G.

Tri is the commercial name for the chemical compound trichlorethylene, which is a solvent for oils, fats, greases, waxes, resins and gums. It is a chlorinated hydrocarbon liquid having the formula C_2HCl_3. The important characteristics are shown in the table.

PROPERTIES OF TRICHLORETHYLENE

Color	water white
Specific gravity at 60° F.	1.4762
Weight/gal. lbs.	12.25
Viscosity @ 77° F., centipoises	0.550
Boiling point, °F.	188
Freezing point, °F.	—126°F.
Coefficient of expansion	0.00119

Trichlorethylene may be used for the treating of lubricating oil stocks as a selective solvent for the removal of wax. The process is described by the manufacturer of the chemical as follows:

In this process tri is added to the mineral oil containing the heavy wax. A solution of oil in tri is formed which is heavier than the wax. On centrifuging this mixture, the heavy tri-oil solution flows toward the periphery of the centrifugal bowl, where it is discharged through ordinary outlets. The lighter wax flows toward the center of the centrifugal bowl where it is removed by a type of screw conveyor or by some other mechanical transporting device. This operation is continuous. Treatment of the mixture before centrifuging may include cooling to effect a more complete separation of the wax and oil. After the wax is removed, the tri is readily removed from the oil by distillation.

Factors for Converting Barrels to Metric Ton Measurements

Can you supply us with the proper conversion factor for changing barrels of crude oil and the several most important petroleum products to metric tons? We are informed that there is a standard formula for doing this—V. R. E.

The quantities of petroleum oils are reported by several countries in metric tons, 2,204.6 pounds. When changing this figure to United States standards it is necessary to know the A.P.I. gravities if an accurate figure is desired.

The U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, has proposed a number of factors which may be satisfactory when no more than approximations are required.

Additional data showing the ordinary gravities with the corresponding weights per 42 U. S. barrel, have been added.

BARRELS PER METRIC TON AND POUNDS PER BARREL

Product—	Gravity A.P.I.	Lbs./bbl.	Bbls./metric ton (approx.)
Crude oil	36	295.596	7.0
Gasoline	60	258.552	8.50
Naphtha	54	256.910	8.50
Kerosene	42	285.390	7.75
Solar oil	40	288.708	7.29
Gas oil	36	295.596	7.25
Lub oil	24	318.402	7.00
White oil	28	310.380	7.00
Fuel oil	16	335.664	6.66
Road oil	10	349.902	6.50

When cubic meters are shown, they may be converted on the basis of one cubic meter is equivalent to 6.29 bbls. The United States barrel of 42 gallons is equivalent to 35 Imperial gallons.

The practice in the United States is to consider the following weights per barrel: Grease 315 pounds; wax, 280 pounds; petrolatum, 300 pounds; asphalt and bitumen, 364 pounds.

PERSONAL PARAGRAPHS

A. M. GEE, of Findlay, Ohio, chief counsel for the Ohio Oil Company, is spending his vacation in Yellowstone Park.

CHESTER MILLIKEN, with Zingery Oil Map Company, and wife, Fort Worth, Tex., are on vacation in Chicago and Illinois cities.

L .C. SCOTT, sales manager for the D. & B. Pump & Supply Company, Dallas, Tex., returned from Pittsburgh, Pa., and eastern points.

DAVID A. SHEPARD, of the Bedford Petroleum Company, Paris, France, arrived in New York City, Monday, July 8, on the Normandie of the French line.

JOHN M. CAMERON, assistant secretary of the Planning and Coordination Committee, has accepted a position with the Texas Company as supervisor of service stations. Mr. Cameron will be located at Scotts Bluff, Neb.

H. BOYD, acting chief scout, and ROSS LEARD, in the engineering department of the Magnolia Petroleum Company, Dallas, Tex., motored to Oklahoma over the week-end to look over the Fitts Pool and the Oklahoma City Field.

MRS. DESMOND BOGGS and children of Negritos, Peru, are spending the summer at Oil Springs, Ontario.

DR. J. A. L. HENDERSON has left London, England, for Canada and the United States on professional business.

EARL J. BROBERG, consulting mechanical engineer, Tulsa, is spending the summer at his cottage near Belle Vista, Ark.

R. M. SHANKS, local manager for the Union Gas Company of Canada at Petrolia, Ontario, has been elected president of the Petrolia Lions Club.

J. F. (COYOTE) HORNBECK, scout for the Skelly Oil Company at Houston, Tex., is spending a two weeks' vacation in the mountains of Colorado.

M. D. SELF and family have left for a trip to the Grand Canyon and other western points. Mr. Self is district land man for the Magnolia Petroleum Company, Midland, Tex.

M. H. MOSIER, president of the Petroleum Company, has returned to Los Angeles, Calif., following a business trip to the East Texas Field where his company has productive holdings.

RALPH TALLEY and family, of Dallas, Tex., are making a motor trip through the western states on a vacation trip. Mr. Talley is head of the land department of the Magnolia Petroleum Company.

THE honorary degree of Doctor of Science was conferred upon CARROLL A. HOCHWALT, vice president of the Thomas & Hochwalt Laboratories, Inc., at the commencement of the University of Dayton.

CHARLES W. GRIMES, oil producer, Tulsa, accompanied by MRS. GRIMES, has moved to his summer residence at Deer Lake, Minn.

I. A. O'SHAUGHNESSY, president of the Globe Oil & Refining Company and the Lario Oil & Gas Company, with his family, is traveling in Europe.

F. C. WOOD, geologist and engineer, has been appointed assistant to ROBERT H. DOTT, director of the Oklahoma Geological Survey, with headquarters in Norman.

R. G. (BOB) WILSON, in the land department of the Gulf Production Company, Fort Worth, Tex., is taking several weeks' leave from his duties for a general rest advised by his doctor.

R. V. EVERIDGE, purchasing agent for the Rancho Oil Company, Dallas, Tex., is recuperating in Hot Springs, Ark., from an infection resulting when some teeth were extracted.

RAYMOND J. STIPEK, geologist for the Gulf Production Company for five years, has received the degree of Bachelor of Laws and has been admitted to practice before the courts of the State of Kansas and the Federal District Court.

R. J. STEEL has been made district geologist in West Texas and New Mexico for the Indian Territory Illuminating Oil Company.

W. K. WARREN, president of the Warren Petroleum Company, Tulsa, was a visitor in New York City and other eastern points last week.

W. W. KLINGENSMITH, traffic manager of the Marathon Oil Company, Tulsa, is touring Ohio, Pennsylvania, and New York on his annual vacation.

G. E. MASON is now the Houston representative for the Gatke Corporation, manufacturers of brake lining and friction materials for industrial oil field machinery.

DANA SECOR has been promoted to the post of district geologists of the Panhandle division of Skelly Oil Company after serving as assistant geologist of the company's Gulf Coast division.

W. M. PECK, head of the land department for the Pure Oil Company, at Saginaw, Mich., was married to MISS DOROTHY ANDREWS, of Fort Worth, Tex., the middle of June. They are taking a Carribean cruise and visiting Mexico City.

R. H. McLEMORE, petroleum engineer for the Sun Oil Company at Houston, Tex., and MISS ETHEL RUTH WARD of Houston, were married June 30.

M. E. MOCKLEY, superintendent, natural gasoline plants, Amerada Petroleum Corporation, Tulsa, accompanied by MRS. MOCKLEY, is spending his vacation in California.

J. H. McLAREN, land man and scout, and N. P. ISENBERGER, geologist, both with the Phillips Petroleum Company at Houston, Tex., have been transferred to the Southwest Texas district.

GENE W. MOREHEAD, formerly land man and scout for the Simms Oil Company at Shreveport, La., is now with the Tide Water Oil Company, in coastal Louisiana in the same capacity.

DR. G. S. HUME, of the Geological Survey of Canada at Ottawa, has arrived in Edmonton to take charge of survey crews operating this summer in eastern Alberta and western Saskatchewan.

ERNEST MAPP, representative for Black, Sivalls & Bryson, Inc., Odessa, Tex., was injured in an automobile accident near Wink, Tex., on July 1. He has just been released from a West Texas hospital.

FRANK BURT, of the General Petroleum Corporation, and R. W. HEATH, of the Signal Oil & Gas Company, were recently appointed members of the publicity and public relations committee of the California Natural Gasoline Association.

JOSEPH MAUGHAN, of Lethbridge, Alberta, arrived recently in Calgary from Houston, Tex., with a truck load of rotary drilling equipment for the Union Freehold Oil

Do You Remember?

From The Oil and Gas Journal Files

25 YEARS AGO

July 12, 1910

C. D. Greenlee, widely known eastern oil man, has joined the Penn Midway Oil Co. of California as vice president.

Kansas and Oklahoma crude oil of 30 gravity and above sells for 38 cents per barrel. Meanwhile, Spindletop's low gravity crude sells for 80 cents and all other Gulf Coast crudes 75 cents. Texans get 75 and 80 cents per barrel; Pennsylvania Grade producers receive $1.30.

B. E. Horrigan, of Tulsa, and Miss Lillian Schmutz, of Chanute, Kans., were married on July 5. Mr. Horrigan is field manager of the Kansas Torpedo Co., and his bride has been engaged with the company in a secretarial position.

Joseph E. Tomlinson, Tulsa oil man, associated with Seth B. Ely in the ownership of the Roberts Oil Co., dies in a Tulsa hospital.

20 YEARS AGO

July 15, 1915

The deal whereby the Roxana Petroleum Corp. (Royal Dutch-Shell) purchased Oklahoma stored oil from the Devonian Oil Co., a $2,000,000 transaction, was held up by the U. S. Department of the Interior, but was finally approved. Some commentators think the delay was caused by the fear in Washington of a "foreign invasion" of American oil fields.

Charles N. Sherman, expert at cementing wells, writing from a distant field, chides Cushing operators for their inability to get a water shutoff in that field. Any wide-awake superintendent "who knows how" should be able to cement off the water, Mr. Sherman says.

T. J. Vandergrift, pioneer producer, dies at the home of his nephew, Elisha Robinson, in Columbus, Ohio, aged 69 years.

Cornelius S. Maloney, well known tank builder in the Eastern and Mid-Continent Fields, dies in Bradford, Pa.

McKeesport, Pa., is excited over a 75,000,000-foot gasser on the George Speigel farm on the Foster road near the city.

10 YEARS AGO

July 16, 1925

Prairie Oil & Gas Co. advances crude prices an average of 12½ cents per barrel and all other companies follow suit. Thirty-six gravity Oklahoma, Kansas and North Texas crude is now $2.04 per barrel. Garber crude sells for $2.52 and $2.68, and Tonkawa crude $2.52 per barrel. Burbank crude and most of the North Texas crudes bring $2.28 on the new schedule.

Carter Oil Co. is the first big company east of California to adopt the eight-hour daily work schedule in its field operations. The company put on 100 new men to conform to the new work day.

The world's deepest test for oil is drilling at 7,200 feet. It is Producers & Refiners Corp.'s well on the Simpson Ridge anticline in Laramie County, Wyoming.

Corporation. Despite detours necessitated by flooded highways the journey from Houston to Coutts, Alberta, was made in five days.

ARTHUR FIELD, of the International Petroleum Company, Ltd., left New York City, July 6, for Cartagena, Colombia.

D. F. THOMAS, driver for the Dallas Gas Company, Dallas, Tex., has received a silver medal for safe driving for six years. During that period he traveled 156,000 miles without an accident. He was an ammunition truck driver during the war.

D. M. GREER, of the American Instrument Company of Washington, D. C., visited refinery offices in Tulsa in the past week.

GEORGE SUDER, engineer for Frick-Reid Supply Corporation, Tulsa, has returned to his headquarters after a trip to Fort Worth, Tex.

A. S. PARKS, petroleum engineer for the Stanolind Oil & Gas Company at Houston, Tex., has resigned effective July 1, and has opened offices in the Sterling Building, where he will do consulting work.

W. HUMPHREYS and W. HOELSCHER, of the National Oil Refining Company, of Findlay, Ohio, were in Petrolia, Ontario, recently to supervise the opening of the new plant of Canadian Oil Companies, Ltd.

G. RAYMOND, vice president in charge of manufacturing and chief engineer for Black, Sivalls & Bryson, Inc., Oklahoma City, Okla., is making a business trip through Wyoming, Montana and into Calgary, Canada.

FRANK SMITH, an independent operator, associated with his brother, E. L. SMITH, president of E. L. Smith Oil Company, with headquarters at Mexia, Tex., spent several days in Houston, Tex., last week on business.

DR. E. R. LEDERER, vice president of the Texas Pacific Coal & Oil Company, Fort Worth, Tex., who is on leave in connection with the labor committee of the Planning and Coordination Committee, has returned to Washington, D. C., after a short visit to his home.

SAM A. HARTWELL, JR., has arrived in Paris to establish headquarters as European representative of the Pennsylvania Grade Crude Oil Association.

J. S. COSDEN, president of the Cosden Oil Corporation, recently sailed on the Bremen for Europe, where he will spend several weeks at a German health resort.

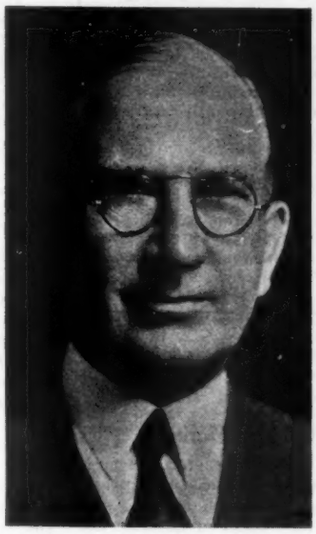
MR. and MRS. J. C. MAXWELL, of Fort Worth, Tex., sailed from New York on the Steamship Lucia on July 7, for South America. They are to visit the Panama Canal, Valparaiso, Santiago, and Rio de Janeiro.

JOHN D. ROCKEFELLER celebrated his ninety-sixth birthday at his Lakewood, N. J., estate, Monday, July 8. Several members of the family spent the day with him. His health is said to be better than it was a year ago.

CAPT. FRANK FRANTZ, former governor of Oklahoma, veteran oil man in the Mid-Continent and Rocky Mountain fields, and member of Roosevelt's Rough Riders in the Spanish-American war was awarded the Silver Star citation for gallantry in action at the battle of San Juan Hill, Cuba, at a ceremony held in the Veterans Club Building in Tulsa on Monday.

Began Oil Career at Spindletop

James A. Bermingham, vice president and manager of the production department of the Texas Company (California), entered the oil business in 1901 as secretary and field manager of the Boss Oil Company, operating in the Spindletop Field, Texas. Two years later he moved to Chanute, Kans., following the discovery of oil in that region, developing leases for his company at first and later becoming an independent operator in Kansas, Oklahoma, Gulf Coast, West Texas and North Texas fields. For three years, 1924 to 1927, he was the West Texas representative of Simms Petroleum Corporation.



JAMES A. BERMINGHAM

On January 1, 1928, Mr. Bermingham joined the Texas Company in Fort Worth, Tex., as assistant manager of the West Texas division, producing department. In October of that year he was transferred to Denver, Colo., as vice president and general manager of the Texas Production Company (Rocky Mountain subsidiary of the Texas Company), at the same time being placed in charge of the Texas Company's producing operations in Canada. In April, 1929, he was transferred to Los Angeles, Calif., where he became vice president and director of the Texas Company (California) and manager of the producing department.

Mr. Bermingham was born in Lincoln, Ill., and during his school days he got well into the sciences and mathematics and got some training in accounting besides. He married Miss Lorena Beach, of Lincoln, in 1900. They have three children. If Mr. Bermingham were asked to name his favorite recreation he probably would say horseback riding, to which his interest in the matter of diversion has been largely confined in recent years.

GEORGE HAYDON, of Coffeyville, Kans., is at Petrolia, Ontario, in connection with the inauguration of the new recovery plant of Canadian Oil Companies, Ltd.

O. H. POWELL, pipe line superintendent for the Texas division of the Stanolind Pipe Line Company at Fort Worth, Tex., was a business visitor to Houston, Tex., the past week.

E. D. GABY has been placed in charge of the newly opened West Texas office of Geophysical Service, Inc., at Midland. Fifteen men will work out of this office, covering New Mexico also.

T. G. HOLLINGSWORTH, chief clerk to superintendent of production of the Gulf Production Company, Fort Worth, Tex., has returned with his family from a vacation spent in New Mexico.

JOHN C. MILLER, chief geologist of the Southwest Texas division for the Texas Company, with headquarters at Houston, Tex., spent several days in San Antonio, Tex., the past week on business.

E. G. WOODRUFF, consulting geologist, Tulsa, left for Memphis, Tenn., Sunday to consult with U. S. Army engineers regarding work to be done in studying the geology of all proposed dam sites for Arkansas River flood control project.

A. I. LEVEORSEN, president of the American Association of Petroleum Geologists, and formerly chief geologist for the Tide Water Oil Company at Houston, Tex., left the past week with his family for an extended vacation in Minnesota.

ELMER H. FINCH, geologist for the Venza Oil Company (Sinclair), recently returned to the United States from Venezuela, where he has been stationed for several months.

CLIFTON R. SWARTS, production engineer for the Lago Petroleum Corporation in Venezuela, has been on a two and one-half months' vacation in Oklahoma and California following three years' service.

F. R. BANKS, O.B.E., F.R.Ae.S., European technical representative of the Ethyl Gasoline Corporation, has been awarded the Taylor Gold Medal of the Royal Aeronautical Society (London) for 1934, for the paper on "Ethyl Petrols for Aviation Purposes," which he delivered before the society in January, 1934.

HARVEY S. GARLICK has arrived in the United States from London, England, to take a position with the research and development department of E. F. Houghton & Company, Philadelphia, Pa. In England for eight years he was connected with the lubricating and grease manufacturing departments of the Socony-Vacuum Oil Company, Ltd.

R. R. HAWKINS, chief engineer of the Texas Company, has returned from Pennsylvania where he has been studying recovery methods by water, air and gas in the old fields of that State.

HORACE ROYER of the Kansas land department of the Indian Territory Illuminating Oil Company has been promoted to be manager of the Colorado land office with headquarters at Colorado Springs.

W. S. S. RODGERS, president of the Texas Company, stressed production within market limits as a safeguard to the future to the Montana oil industry, following his recent visit to the northern oil fields in company with A. R. WILSON, Rocky Mountain division manager of the company.

FERRO WILLIAMS, of the George F. Getty Company, was elected president at the annual meeting of the Los Angeles Petroleum Accountants Society; R. H. HORNIDGE, of the Union Oil Company, first vice president; R. L. MINCKLER, of the General Petroleum Corporation, second vice president. D. S. KILGOUR was re-elected secretary-treasurer. R. P. HUGGINS, of the Western Gulf Oil Company, was presented with an appreciation gift for his services to the society.

ED RUMSEY of the Shell Petroleum Corporation has been located as scout at Lamar, Colo.

E. W. BISETT, production superintendent for Skelly Oil Company in the Panhandle district, has returned to Skellytown, Tex., after a trip to California.

B. H. van der LINDEN, production manager for the Royal Dutch group, The Hague, Netherlands, has been spending several weeks in visiting oil-producing centers in the United States.

A. G. (BILL) EVANS-LOMBE, district manager for O.C.S. Company, Fort Worth, Tex., and family, have returned from a vacation spent in Santa Fe, Taos and Eagle Nest Lake, N. Mex.

LESLEY FISHER, L. W. HEWITT, and GEORGE S. BERRY, all with the Sinclair Prairie Oil Company at Houston, Tex.; R. O. LOWRANCE with the Shasta Oil Company at Houston and a party of friends, returned last week from a fishing expedition off Aransas Pass. The prize catch was by Mr. Fisher who landed a large tarpon. Mr. Hewitt claims he caught several red fish, but this was denied by witnesses.

Gasoline Demand Presaging Refinery Runs of 3,000,000 Barrels Daily

By W. T. ZIEGENHAIN

Refined oil quotations were generally unchanged for the week in Group 3 but there is less of the pessimism today compared with seven days ago. The major-company buying program continues to absorb sufficient gasoline and kerosene to keep the field free of distress material. While eyes are turned toward the few locations in which crude price cuts have been posted and where crude is moving below the market, the summation of these factors has been outweighed in their influence by the sustained demand for gasoline.

For more than a month gasoline has been moving from refineries at a relatively fast rate and day by day refinery sales managers have been expecting a falling off in their business. They had become cautiously joyful and among themselves had been wondering how long it would last. They have been working so close to the firing line they could see the dangers but not the reinforcements. Their old-fashioned enthusiasm has been given such severe jolts in the past four years they refused to get excited about what appeared to be a streak of favorable business now. On the side of the dangers they see the possibility of crude oil production gaining to a point where price concessions will become a common practice. Those who have worked close to the major company buying program also know that there is less inducement for these majors to continue making commitments than there was in previous months and loss of their support would mean readjusting the Mid-Continent spot for market about 2,500 cars a month. Also, every week there is news that a new refinery is to be built or some important existing plant to be modernized and its capacity increased and as this program moves at a quickening pace those on the side lines see the chance for another period of "under-consumption."

The normal spot marketing picture has been so distorted by major company buying, gasoline production allocations, and codes of one kind or another, it is only natural that apprehension followed long after the Supreme Court's NRA decision. It now appears that most of that apprehension was not justified and as a matter of fact there is more genuine reason for optimism.

Refined Oil Market Barometer

Although prices on refinery products remained generally unchanged throughout the United States during the past week the market assumed a stronger position because of the improved weather conditions which in turn are causing a better demand for motor fuels than had been anticipated. California proves to be the single point of uncertainty and this is due to retail price wars in important consumption centers.

OKLAHOMA—Estimates on gasoline shipments are being revised upward for July.

EAST COAST—Record gasoline consumption support confidence in the entire refined oil market.

CHICAGO—Absence of rain has sharpened the local demand for gasoline.

PENNSYLVANIA—Gasoline demand remains good with lub prices firm.

CALIFORNIA—Local gasoline price wars clouding trend of entire refined oil market.

GULF COAST—Good demand for aviation gasoline. All prices firm.

Near 3,000,000-Bbl. Mark

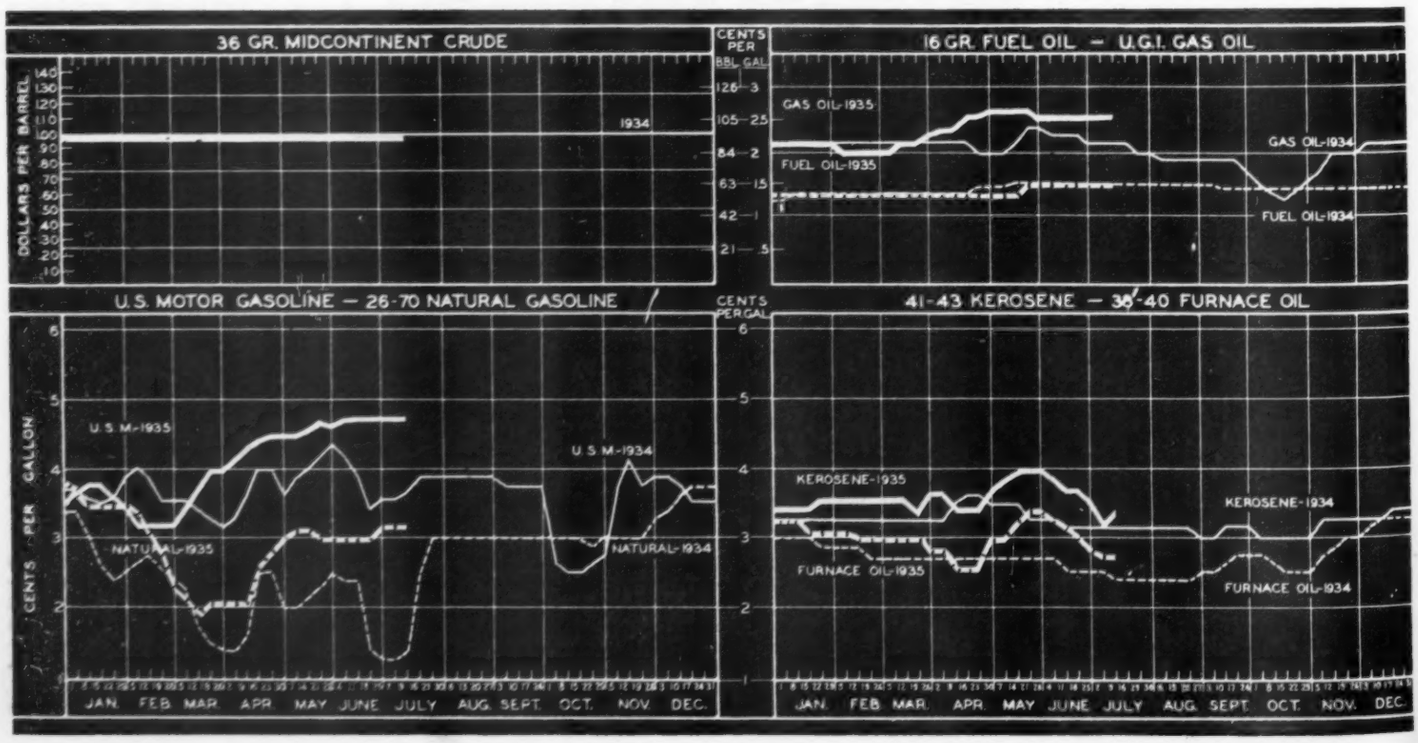
Except in California, the retail motor fuel market is in a favorable position to at least hold prices at their present level throughout the coming season of higher consumption. Stocks of gasoline are below a year ago and despite higher crude runs, stocks have been falling off consistently for four months. This means that in the face of unusually bad weather and road conditions over the greater portion of the Middle West and East gasoline consumption has been exceptionally good and has been sufficient to absorb the 2,700,000 bbls. or more of crude oil daily. It leads to the prediction that by the close of August daily average crude runs in refineries of the United States may reach the 3,000,000-bbl. a day mark, something to be considered as very favorable in view of the support such a demand will give the crude market both real and psychologically.

New Cars a Factor

This unexplainable demand for gasoline at a time when the weather has been unfavorable, has probably come from new car owners. New car registrations have been establishing records month after month so far this year. The effect of new car sales and the desire on the part of the owners to drive these cars more consistently offers a reason for the favorable gasoline consumption.

In addition to the increased demand from new car buyers, hot weather and the vacation season ahead, all of which will tend to make gasoline consumption mount fast, there is the factor of limited manufacturing facilities to consider.

Theoretically the refining industry in the United States is operating at something like 55 per cent of capacity. Actually, however, the gasoline production is much nearer maximum than this. During the past five years of generally low prices, equipment has been allowed to deteriorate and relatively few major replacements have been made. Cracking equipment deteriorates fast and this must be relied upon now to supply the greater share of the most desirable motor fuel. Any substantial increase in gasoline consumption cannot be supplied from existing cracking equipment and the deficit will have to be supplied by running more crude and producing more straightrun. It is this fact that further substantiates the belief that we are definitely headed for a crude consumption of 3,000,000 bbls. a day over the relatively near future to be followed by the installation of additional cracking capacity to take care of next year's needs.



Year's Heaviest Sales During Holiday Encourages Eastern Gasoline Market

By C. O. WILLSON

NEW YORK, July 8.—Sellers of gasoline were hopeful today that a holiday week-end period extending in many cases from Wednesday evening until this morning would bring in a rush of orders this week to fill depleted storage. Weather conditions in this territory were generally favorable for motoring over the past few days and it is believed that the heaviest consumption of the year took place during the four days. Sellers said that in late June there was less buying than usual in preparation for the holiday period, this action being explained in part as due to the fact that many were hoping that the 1-cent federal tax on gasoline would be dropped July 1. So far as could be determined today there will be no great spurt in buying with the certainty that sellers have plenty of material on hand to take care of the demand.

Tank Car Prices Unchanged

So far as actual consumption is concerned, as has been explained before in these columns, the gasoline demand is greater than last year. Early reports from resort centers indicate that this business is running ahead of the past several years. Companies which have emphasized their maps and other services to tourists state that the inquiries are running ahead of last year. Most of these inquiries are for maps covering New England, eastern Canada and parts of New York State, but a number are for transcontinental routes with the exposition at San Diego the destination. An increasing number of companies have devised special methods to secure a larger share of this increasing tourist business which, it has been predicted, will be the greatest since 1929 or 1930.

So far as domestic tank car prices are concerned they are unchanged from the levels established several weeks ago in New York Harbor. The same situation prevails throughout the Atlantic Seaboard territory except at points where subnormal prices have developed in the retail end.

The number of these subnormal points is increasing and this is one of the developments which is causing concern among the sellers who had been hoping that the price levels established as a result of gradual advances starting in February, could at least be maintained through the summer months. The outstanding weak points are Buffalo and Boston. Prices were recently advanced at the latter point but they are still below normal with marketing conditions unsettled. In addition there are a number of smaller points located in the Atlantic Seaboard states where retail, dealer and posted tank car prices are below normal.

It is said that in some of these price wars, the major companies rather than the smaller independents are taking the prominent parts. Cargo buyers who purchase their supplies from the Gulf and operators of smaller refineries there have often been charged with being responsible for price wars at eastern points. They were accused of selling to jobbing interests at low prices and the latter in turn sold to dealers and through their own stations, at cut prices. The Gulf market has been steady for several weeks and high enough so that cargo buyers have not been in a position to give concessions in sales at their terminals. It is said that disagreements among the majors as to customers entitled to commercial discounts and special concessions to certain dealer accounts were responsible for a general decline in one city recently. The companies concerned in all cases were maintaining their posted tank car prices but at the same time were giving various type concessions to increase their tank wagon and retail station business. This is an old story in marketing and indicates nothing except that one or more companies have more gasoline on hand or in the making than they can sell readily and they feel compelled to resort to special concessions to buyers in order to increase gallonage.

These situations in the past often have been remedied before they became of more than local importance. In many other cases they have indicated a weak marketing situation which became general. Developments last fall and early this year constitute a recent example of this development with prices far below the cost of refining and distribution.

In the local tank car market, the prevailing prices are 5¾ cents for low octane, 6 cents for middle octane, 6¼ cents for 65 octane and above and 6½ cents for ethylized regular grade. Barge prices are one-fourth cent lower. Reports continue that these prices are being shaded especially in the middle octane material. If these concessions are being made they do not constitute a large volume of business.

The export gasoline market at the Gulf was inactive over the week with quotations varying from 4⅞ cents for U. S. Motor to 5¼ cents for 60-64 375 endpoint.

No additional price concessions were reported in kerosene. Most of the majors are quoting 5 cents at their terminals with material available as low as 4⅞ cents. Furnace oil prices are also unchanged. Sellers wishing to dispose of spot material in furnace oils or kerosene are not finding many buyers. The latter are said to have indicated that they would be interested in purchases for storage purposes at prices substantially under the present market. The sellers feel that present quotations are too low and so far as known they are maintaining quotations which range from 3½ cents for No. 4 furnace oil to 5 cents for No. 1 furnace oil and range oil. More activity in this market is expected by the end of the month or early August. The next 90 days are the busy season in new installations of oil burners. Manufacturers are predicting increases of from 35 to 40 per cent in number of installations in this territory. The outlook for sales of small burners of various types for ranges and heaters is also favorable.

Industrial Fuels

There has been some slowing up in the demand for industrial fuels in this territory. The marine demand for bunker fuels has also been slower than expected. The prevailing tank car price in New York Harbor area on industrial fuels is 3½ to 3¾ cents. Bunker fuels are unchanged at $1.15 and Diesel fuels are $1.65. The demand for the latter has increased due in part to the summer season in which many pleasure boats use Diesel fuel.

All grades of refined wax and crude scale wax are listed as "dull" with no changes in prices. The same situation applies to the steam refined stocks and bright stocks. The domestic and export demand for bright stocks continues to be disappointing. It had been hoped that the summer demand would establish prices at higher levels.

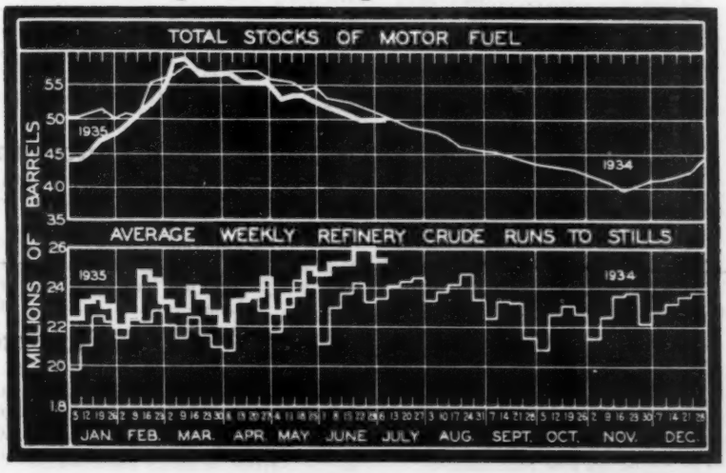
Crude runs to stills at East Coast refineries jumped from 437,250 bbls. daily in April to 475,730 bbls. in May when the runs were practically the same as in May of last year. It is worthy of note that while crude runs to stills were practically the same for May, 1935, and 1934, the gasoline output in May this year was substantially greater due to increased gasoline recovery which jumped from 37.8 per cent to 41.4 per cent.

Refiners found outlets for this additional output, stocks being reduced a little more than 1,000,000 bbls. during the month. The situation in regard to other products was less favorable. The supply of kerosene exceeded the demand and stocks increased to nearly 2,000,000 bbls., a gain of more than 65 per cent over May 31, 1934. Stocks of distillate and residual fuel oils also increased. Stocks of lubricants were practically unchanged from April 30 with a 1,500,000-pound gain in wax stocks.

American Petroleum Institute Weekly Refinery Statistics

Week Ended July 6, 1935

	Capacity reporting per cent	Daily crude runs (bbls.)	Finished motor fuel (bbls.)	Gas oil and fuel oil (bbls.)
East Coast	100.0	492,000	15,695,000	11,494,000
Appalachian	94.8	101,000	2,112,000	823,000
Ind., Ill., Ky.	95.9	380,000	9,364,000	4,703,000
Okla., Kans., Mo.	84.8	273,000	5,306,000	4,555,000
Inland Texas	48.5	100,000	1,160,000	1,744,000
Texas Gulf	96.4	538,000	5,007,000	10,204,000
Louisiana Gulf	96.4	125,000	1,249,000	3,877,000
N. La. and Ark.	90.0	47,000	278,000	387,000
Rocky Mountain	61.9	46,000	900,000	801,000
California	92.6	462,000	9,067,000	63,279,000
Total United States..	89.5	2,564,000	50,138,000	101,867,000



REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

The following quotations are exclusive of the federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils.

Refinery Gasoline

OKLAHOMA (Group 3)—	July 9		July 2	
U. S. Motor grades:				
Below 63 octane	.04¾	.04⅞	.04¾	.04⅞
63-70 octane	.05⅝	.05⅞	.05⅝	.05¾
60-62 400 grade:				
Below 63 octane	.04¾	.04⅞	.04¾	.04⅞
63-70 octane	.05⅝	.05⅞	.05⅝	.05¾
64-66 375	.04⅞	.05	.04⅞	.05
68-70 360	.05	.05⅛	.05	.05⅛
NORTH TEXAS—				
U. S. Motor grades:				
Below 63 octane	.04¾	.04⅞	.04¾	.04⅞
63-70 octane	.05⅝	.05¾	.05⅝	.05¾
60-62 400	.04¾	.04⅞	.04¾	.04⅞
64-66 375	.04⅞	.05	.04⅞	.05
NORTH LOUISIANA (Ark., N. La. & Miss. del.)				
U. S. Motor grades:				
Below 63 octane	.05½		.05½	
63-70 octane	.06¼		.06¼	
60-62 400	.05½		.05½	
ARKANSAS (Ark., N. La. & Miss. del.)—				
U. S. Motor grades:				
Below 63 octane	.05½		.05½	
63-70 octane	.06¼		.06¼	
CHICAGO (based on Group 3)—				
U. S. Motor grades:				
Below 63 octane	.04¾	.04⅞	.04¾	.04⅞
63-70 octane	.05⅝	.05¾	.05⅝	.05¾
60-62 400	.04¾	.04⅞	.04¾	.04⅞
64-66 375	.04⅞	.05	.04⅞	.05
68-70 360	.05	.05¼	.05	.05⅛
Aviation fighting grade	.05¾	.05⅞	.05¾	.05⅞
PENNSYLVANIA (inland refineries)—				
58-60 U. S. Motor:				
Below 60 octane	.06		.06	
60-64.9	.07		.07	
65-70 octane	.07¼		.07¼	
64-66 375	.06¾		.06¾	
68-70 350	.06⅞		.06⅞	
CALIFORNIA (domestic movement)—				
54-58 U. S. Motor	.04¼	.05¼	.04½	.05½
58-60 400	.05	.06	.05	.06
EAST COAST—				
U. S. Motor, below 60 octane:				
*New York (Bayonne)	.05¾		.05¾	
Baltimore	.05¾		.05¾	
U. S. Motor, 60-64.9 octane:				
*New York (Bayonne)	.06		.06	
Philadelphia	.06	.06¼	.06	.06¼
Boston	.06		.06	
Baltimore	.06	.06¼	.06	.06¼
Charleston, S. C.	.06		.06	
U. S. Motor, 65 and above:				
*New York (Bayonne)	.06¼		.06¼	
Philadelphia	.06¼	.06½	.06¼	.06½
Boston	.06¼		.06¼	
Baltimore	.06¼		.06¼	
Charleston, S. C.	.06¼		.06¼	

*All grades of gasoline one-fourth cent less for small barge shipments.

GULF COAST (domestic)—				
U. S. Motor:				
Below 60 octane	.05	.05¼	.05	.05¼
60-64.9 octane	.05¼	.05½	.05¼	.05½
65 octane and higher	.05½		.05½	

Naphtha

PENNSYLVANIA (inland refineries)—	July 9	July 2
50-52 450 (blending)	.05⅞	.05⅞
52-54 450 (blending)	.05⅞	.05⅞
54-56 450 (blending)	.06	.06

CHICAGO (based on Group 3)—				
50-52 450 (blending)	.04¾	.05	.04¾	.05
Cleaners' naphtha, 56-58 gr., 200 i.b.p., 320 e.p.	.06⅞	.07	.06⅞	.07
Lacquer diluent, 180 i.b.p. 250 e.p.	.07⅞	.08	.07⅞	.08
Lacquer diluent, 140 i.b.p. 200 e.p.	.08⅞	.09	.08⅞	.09
Rubber solvent, 68-70 gr., 100 i.b.p., 300 e.p.	.06⅞	.07	.06⅞	.07
Stoddard solvent, 300 i.b.p. 410 e.p., over 83° flash	.06⅜	.06½	.06⅜	.06½
Pet. thinner, 290-300 i.b.p. 410 e.p., over 83° flash	.06⅜	.06½	.06⅜	.06½
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p., 330 e.p.	.06⅞	.07	.06⅞	.07
Petroleum spirits	.05⅞	.06	.05⅞	.06

Natural Gasoline

OKLAHOMA (Group 3)—	July 9		July 2	
Grade 26-70	.03⅛		.03⅛	
Grade 18-55	.03¾		.03¾	
Low vapor pressure grades:				
14 lb. v.p. (max.)	.04¼	.04½	.04¼	.04½
12 lb. v.p. (max.)	.04⅝	.04¾	.04⅝	.04¾
NORTH TEXAS—				
Grade 26-70	.03		.03	
Grade 18-55	.03¾		.03¾	
Low vapor pressure grades:				
*14 lb. v.p. (max.)	.04¼	.04⅜	.04¼	.04⅜
*12 lb. v.p. (max.)	.04⅝		.04⅝	

Nominal.

NORTH LOUISIANA (Ark., N. La. & Miss. del.)				
Grade 26-70	.03¼		.03¼	
CALIFORNIA—				
75-85 375-390	.04¾	.05½	.04¾	.05¾

Kerosene

(All kerosene water white)

OKLAHOMA (Group 3)—	July 9		July 2	
41-43	.03⅜	.03⅝	.03¼	
42-44	.03⅜		.03⅜	
NORTH TEXAS—				
41-43	.03¼		.03¼	
NORTH LOUISIANA (Ark., N. La. & Miss. del.)				
41-43	.04		.04	
ARKANSAS (Ark., N. La. & Miss. del.)—				
41-43	.04		.04	
PENNSYLVANIA (inland refineries)—				
45	.04¾		.04¾	
46	.04⅞		.04⅞	
47	.05		.05	
CHICAGO (based on Group 3)—				
41-43	.03¼	.03½	.03¾	.03½
42-44	.03½	.03¾	.03⅝	.03⅞
CALIFORNIA (Pacific Coast consumption)—				
38-40 high burning test	.03¼	.04½	.03¼	.04¾
NEW YORK (Bayonne, N. J.)—				
41-43	.04⅞	.05	.04⅞	.05
GULF COAST (domestic)—				
41-43	.04¼	.04½	.04¼	.04½

Petroleum Coke

(Prices per ton f.o.b. refineries in Chicago area)
(Refineries will absorb freight to 80 cents a ton)

	July 9	July 2
Pile run	6.00	6.00
Direct from still	7.00	7.00
Egg, nut, pea	8.00	8.00
Lump	8.00	8.00

Furnace Oil

OKLAHOMA (Group 3)—	July 9		July 2	
No. 1 prime white, 38-42	.03	.03⅛	.03	.03⅛
No. 1 straw, 38-40	.02¾	.03	.02¾	.03
No. 2 straw, 32-36	.02⅝	.02⅞	.02⅝	.02⅞
No. 2 dark, 32-36	.02½	.02¾	.02½	.02¾
No. 3, 28-32	.02¾	.02⅝	.02⅜	.02⅝
No. 3, 15 and above, 28-32	.02¼	.02⅜	.02¼	.02⅜
NORTH TEXAS—				
No. 1 prime white, 38-42	.03⅛	.03¼	.03⅛	.03¼
No. 1 straw, 38-40	.03	.03¼	.03	.03¼
NORTH LOUISIANA (Ark., N. La. & Miss. del.)				
No. 2, 32-36	.03	.03⅛	.03	.03⅛
ARKANSAS (Ark., N. La. & Miss. del.)—				
No. 2, 32-36	.03½		.03½	
No. 3, 28-32	.03¼		.03¼	
CHICAGO (based on Group 3)—				
No. 1 prime white, 38-40	.03	.03⅛	.03	.03¼
No. 1 straw, 38-40	.02⅞	.03	.02⅞	.03⅛
No. 2 straw, 32-36	.02¾	.02⅞	.02¾	.02⅞
No. 2 dark, 32-36	.02⅝	.02¾	.02⅝	.02¾
No. 3 zero to 15, 28-32	.02½	.02⅝	.02½	.02⅝
No. 3, 15 and above, 28-32	.02½	.02⅜	.02⅛	.02⅜
NEW YORK (Bayonne, N. J.)—				
No. 1	.04⅞	.05	.04⅞	.05
No. 2	.03⅞	.04	.03⅞	.04
No. 4	.03½	.03⅝	.03½	.03⅝

Gas Oil and Fuel Oil

(Gas oil per gal., fuel oil per bbl.)

OKLAHOMA (Group 3)—	July 9		July 2	
U.G.I. gas oil	.02½	.02⅝	.02½	.02⅝
No. 4, 24-28	.87½	.90	.87½	.90
No. 4, 15 and above, 24-28	.75	.80	.75	.80
No. 5	.70	.75	.70	.75
No. 6	.67½	.70	.67½	.70
Below 18 fuel oil, industrial	.65	.67½	.65	.67½
NORTH TEXAS—				
U.G.I. gas oil	.02½	.02⅝	.02½	.02⅝
No. 4, 24-28	.87½	.90	.87½	.90
No. 5	.72½	.75	.72½	.75
No. 6	.67½	.70	.67½	.70
Below 18 fuel oil, industrial	.65	.67½	.65	.67½
NORTH LOUISIANA (Ark., N. La. & Miss. del.)				
U.G.I. gas oil	.02⅞	.03	.02⅞	.03
10-14 fuel oil, industrial	.75	.80	.75	.80
ARKANSAS (Ark., N. La. & Miss. del.)—				
10-14 fuel oil, industrial	.60	.65	.60	.65
CHICAGO (based on Group 3)—				
U.G.I. gas oil	.02⅜	.02½	.02⅜	.02½
No. 4, 24-28	.87½	.90	.87½	.90
No. 4, 15 and above 24-28	.72½	.77½	.72½	.77½
No. 5, 18-22	.65	.70	.67½	.70
No. 6, 10-16	.57½	.60	.57½	.60

Note: Fuel oils of more than 40 cold test generally 5 to 15 cents per barrel in all these areas.

PENNSYLVANIA (inland refineries)—				
36-40	.04⅛	.04¼	.04⅛	.04¼
CALIFORNIA—				
Los Angeles:				
30-34 gas oil, per bbl.	1.05	1.25	1.05	1.25
27 plus Diesel	1.05	1.25	1.05	1.25
27 plus Diesel (bunkers)	1.25	1.30	1.25	1.30
12-16 (bunkers at tide-water)	.87	.95	.87	.95
10-16 (cargo lots)	.75	.92	.75	.92
12-17 (tank cars)	.60	.95	.60	.95
San Joaquin Valley:				
10-18 (tank cars)	.55	.75	.55	.75
San Francisco:				
27 plus Diesel, per bbl.	1.25		1.25	
27 plus Diesel (bunkers)	1.35		1.35	
10-16 (bunkers)	1.00		1.00	
GULF COAST—				
28-30 gas oil	.03½	.03⅝	.03½	.03⅝
28-30 Diesel (bunkers)	1.70		1.70	
Bunker C (bulk cargoes)	.85	.90	.85	.90
Bunker C (bunkers)	.95	1.00	.95	1.00
NEW YORK (Bayonne, N. J.)—				
27 plus, gas oil	.04		.04	

28-30 Diesel (lighterage 6½ cents per bbl.)	1.65		1.65	
28-30 Diesel (tank cars)	.04	.04¼	.04	.04¼
*Bunker C (to ocean-going ships in N.Y. harbor)	1.15		1.15	
Industrial fuel (tk. cars)	.03⅝		.03⅝	

*Lighterage charge 5 cents per barrel additional.

Neutral Oil

(Vis. at 100° F. except Pennsylvania and color N.P.A.)

OKLAHOMA (Group 3)—	July 9		July 2	
Zero to 10 Cold Test:				
150-3	.10		.10	
180-3	.11¼		.11¼	
180-4	.10¾		.10¾	
200-3	.11¾		.11¾	
200-4	.11¼		.11¼	
240-3	.13¾		.13¾	
240-4	.13¼		.13¼	
280-3	.14¾		.14¾	
280-4	.14		.14	
300-3½	.15¼		.15¼	
400-4	.17¼		.17¼	
100-2 paraffin oil	.05¾		.05¾	
15-20 Cold Test:				
200-3	.10¾		.10¾	
200-4	.10¼		.10¼	
240-3	.12¾		.12¾	
240-4	.12¼		.12¼	
280-3	.13¾		.13¾	
280-4	.13		.13	
GULF COAST—				
Pale Oils:				
200-3	.07	.07½	.07	.07½
300-3	.07½	.08	.07½	.08
500-3½	.08½	.09	.08½	.09
750-3½	.09	.09¼	.09	.09¼
1,200-3½	.09½	.09¾	.09½	.09¾
2,000-4	.09¾	.10	.09¾	.10
Red Oil:				
200-5-6	.07	.07¼	.07	.07¼
300-5-6	.07¼	.07½	.07¼	.07½
500-5-6	.08	.08½	.08	.08½
750	.08½	.09	.08½	.09
1,200-5-6	.09¼	.09½	.09¼	.09½
CALIFORNIA (moving to domestic market)—				
Pale Oils:				
100-2½-3	.07½	.07¾	.07½	.07¾
200-2½-3	.08	.08¾	.08	.08¾
300-3-3½	.09	.10	.09	.10
350-3-4	.10½	.11	.10½	.11
400-3-4	.12	.12¼	.12	.12¼
450-3-4	.12½	.12¾	.12½	.12¾
550-3-4	.13	.13½	.13	.13½
600-3-4	.13½	.14	.13½	.14
Red Oils:				
200-4-5	.08½	.09	.08½	.09
300-5-6	.09		.09	
350-5-6	.10	.10¼	.10	.10¼
400-5-6	.10½	.10¾	.10½	.10¾
450-5-6	.11	.11¼	.11	.11¼
500-5-6	.11½	.11¾	.11½	.11¾
600-5-6½	.12	.12¾	.12	.12¾
700-6½ plus	.13	.13¼	.13	.13¼
750-6½ plus	.13½	.13¾	.13½	.13¾
900-6½ plus	.14	.14½	.14	.14½
PENNSYLVANIA—				
150 vis. at 70° F., 3 color, 400-405 flash:				
Zero pour test	.20½	.21	.20½	.21
10 pour test	.19½	.20	.19½	.20
15 pour test	.19	.19½	.19	.19½
25 pour test	.18	.18½	.18	.18½
180 vis. at 70° F., 3 color:				
20 pour test	.21	.21½	.21	.21½
200 vis. at 70° F., 3 color:				
Zero pour test	.25½	.26	.25½	.26
10 pour test	.24½	.25	.24½	.25
15 pour test	.24	.24½	.24	.24½
25 pour test	.23	.23½	.23	.23½

Bright and Steam Refined

OKLAHOMA (Group 3)—	July 9		July 2	
Bright Stocks:				
190-200 D	.18		.18	
150-160 D, 0-10	.15		.15	
150-160 D, 10-25	.14½		.14½	
150-160 25-40	.14		.14	
150-160 E	.14		.14	
Steam refined:				
630 green (treated)	.09½		.09½	
600 light green, untreated	.08½		.08½	
600 dark green, untreated	.05	.06	.05	.06
PENNSYLVANIA—				
Bright Stocks (Pennsylvania grade, No. 8 color, 145-50 at 510; 540-550 flash):				
10 pour test	.20	.20½	.20	.20½
15 pour test	.19	.19½	.19	.19½
20 pour test	.18	.18½	.18	.18½
25 pour test	.17	.17½	.17	.17½
Steam refined:				
600	.09½	.10	.09½	.10
650	.11	.11½	.11	.11½
600 Pennsylvania flash	.12	.12½	.12	.12½
630 flash	.17	.17½	.17	.17½
600 Warren E filtered	.13	.13½	.13	.13½

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—	July 9		July 2	
124-126 (a.m.p.) w.c. scale	.02	.02⅛	.02	.02⅛
PENNSYLVANIA (inland refineries)—				
122-124 (a.m.p.) w.c. scale	.0210	.0215	.0210	.0215
124-126 (a.m.p.) w.c. scale	.0215	.0220	.0215	.0220
NEW YORK—				
Wax in bags fully refined:				
123-125 (a.m.p.) wax	.0420		.0420	
125-127 (a.m.p.) wax	.0430		.0430	
128-130 (a.m.p.) wax	.0455		.0455	
130-132 (a.m.p.) wax	.0470		.0470	
133-135 (a.m.p.) wax	.0530		.0530	
135-137 (a.m.p.) wax	.0555		.0555	
124-126 (a.m.p.) w.c. scale	.0205	.0220	.0205	.0220
124-126 (a.m.p.) y.c. scale	.0200	.0205	.0200	.0205
Petrolatum in barrels, carload lots:				
Dark green	.01⅞		.01⅞	
Amber	.02¾	.03	.02¾	.03
Extra amber	.03	.03⅛	.03	.03⅛
Lily white	.06⅝	.06¾	.06⅝	.06¾
Snow white	.07¾	.07⅞	.07¾	.07⅞
Cream	.05⅝	.05¾	.05⅝	.05¾
CHICAGO (f.o.b. switching district)*—				
122-124 (a.s.t.m.) wax	.0440	.0450	.0440	.0450
125-127 (a.s.t.m.) wax	.0465	.0475	.0465	.0475
127-129 (a.s.t.m.) wax	.0480	.0490	.0480	.0490
130-132 (a.s.t.m.) wax	.0540	.0550	.0540	.0550
132-134 (a.s.t.m.) wax	.0565	.0575	.0565	.0575

*Carload lots in burlap bags of approx. 225 lbs. Add 3¢ for a.m.p.

Export Prices

GASOLINE

GULF COAST—	July 9		July 2	
U. S. Motor	.05		.05	
60-62 400	.05	.05⅛	.05	.05⅛
61-63 390	.05	.05⅛	.05	.05⅛
64-66 375	.05¼	.05⅜	.05¼	.05⅜
LOS ANGELES:				
U. S. Motor grades:				
53-55 octane	.04		.04	
55-65 octane	.04	.04¼	.04	.04¼
65-67 octane	.04¼	.04½	.04¼	.04½
67-69 octane	.04½	.04¾	.04½	.04¾
Above 69 octane	.04¾	.05	.04¾	.05
58-60 400 endpoint	.04½	.05	.04½	.05

KEROSENE

GULF COAST—				
41-43 prime white	.03⅞		.03⅞	
41-43 water white	.03⅞	.04	.03⅞	.04
44 water white	.04¼		.04¼	
LOS ANGELES:				
41-43 water white	.04¼	.04¾	.04¼	.04¾

LUBRICANTS

NEW YORK (f.a.s. in bbls.)—				
Cylinder Stocks:				
600 Warren E	.20		.20	
600 S.R. unfiltered	.16½	.17	.16½	.17
650 S.R. unfiltered	.18		.18	
600 flash S.R.	.19	.19½	.19	.19½
630 flash S.R.	.24	.24½	.24	.24½
Bright Stocks:				
8 color	.24		.24	
6½ plus colors in dilution	.22½		.22½	

NEUTRAL OIL

200-3 color	.28	.30	.28	.30
150-3 color	.23	.25	.23	.25

PARAFFIN WAX

NEW YORK (prices per pound):				
123-125 a.m.p.	.03625		.03625	
125-127 a.m.p.	.0375		.0375	
128-130 a.m.p.	.0400		.0400	
130-132 a.m.p.	.0425	.0450	.0425	.0450
133-135 a.m.p.	.0475		.0475	
135-137 a.m.p.	.05		.05	
Crude scale:				
124-126 w.s.	.0205	.0215	.0205	.0215
124-126 y.s.	.0200	.0210	.0200	.0210

Crude Oil Prices

Oklahoma, Kansas, North Central and East Central Texas

East Texas	$1.00
Corsicana (heavy) (June 17, 1933)*	.80
Other fields.....(See gravity table)	

Note—In East Texas, effective September 29, 1933, by Texas Co., Stanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Shell Petroleum Corp., Gulf Pipe Line Co., Tide Water Oil Co., Sinclair Prairie Oil Marketing Co., Magnolia Petroleum Co., Sun Oil Co., Panola Pipe Line Co., Empire Oil & Refining Co., and Atlas Pipe Line Co. posted 60 cents per barrel in East Texas but on November 3 resumed its posted price of $1 per barrel, making it retroactive to October 22.

*Magnolia Petroleum Co.

West Texas

Crane, Upton, Crockett, Howard, Glasscock, Mitchell (Sept. 29, 1933)	$ .75
Ector, Winkler and Pecos Counties and Lea County, New Mexico (sept. 29, 1933)	.75
Pecos County, Yates shallow Pool (Sept. 29, 1933)*	.65
Jones and Fisher Counties*.....(See gravity table)	

Note—Effective September 29, 1933, by Humble Oil & Refining Co., Texas Co., Gulf Pipe Line Co., Shell Petroleum Corp., Magnolia Petroleum Co., and by Stanolind Oil & Gas Co. in Winkler County, Texas.

*Shell Petroleum Corp.

South Central and Southwest Texas

(See note below table)

Darst Creek	$ .87
Mirando (June 29, 1935)	.75
Luling (Sept. 29, 1933)	.75
Pettus	1.05
Salt Flat	.87
Lytton Springs (Sept. 29, 1933)	.95
Duval County (Sept. 29, 1933)	.80
Saxet (June 29, 1935)	.80

Note—Effective on September 29 by Humble Oil & Refining Co. in Darst Creek, Pettus, and Salt Flat. Effective September 29 in Darst Creek by Gulf Pipe Line Co. and Texas Co. Effective October 2 by Magnolia Petroleum Co. Effective in Pettus and Salt Flat on September 29 by Humble Oil & Refining Co. and Gulf Pipe Line Co. Luling and Lytton Springs by Magnolia Petroleum Co. Duval County by Texas Co. Effective September 20 in Salt Flat by Shell Petroleum Corp. Mirando and Saxet prices posted by Humble Oil & Refining Co.

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$ .70
Tullos, Urania, La. (Jan. 13, 1934)	.87
Nevada, Ark. (Sept. 29, 1933)	.60
East El Dorado (Sept. 29, 1933)	.70
Converse, La. (Mar. 17, 1934)	1.03
Elm Grove, La. (Sept. 29, 1933)	.75
Holly, La. (Nov. 17, 1934)	1.03
Pleasant Hill, La. (Mar. 17, 1934)	1.03
Zwolle, La. (Mar. 17, 1934)	1.03
Champagnolle, Ark. (Mar. 17, 1934)	.81
Lisbon, Ark (Mar. 17, 1934)	1.03
Stephens, Ark. (Sept. 29, 1933)	.70
Urbana, Ark. (Mar. 17, 1934)	.80
Other fields.....(See gravity table)	

Note—Smackover: Effective September 29, 1933, Texas Co., Magnolia Petroleum Co., Standard of Louisiana, Louisiana Oil Refining Corp., Gulf Refining Co. and Phillips Petroleum Co. East El Dorado posted by Magnolia Petroleum Co. and Gulf Refining Co.; Nevada by Standard Oil Co. of Louisiana. Urbana posted by H. L. Hunt, Inc., and Louisiana Oil Refining Co. Converse, Holly, Zwolle and Urbana by Standard Oil Co. of Louisiana; Elm Grove by Simmons Oil & Refining Co.; Pleasant Hill by Standard Oil Co. and Magnolia Petroleum Co.; Champagnolle by Standard Oil Co. and Lion Oil & Refining Co.

Gulf Coast

Grade A and Grade B specification discontinued by leading buyers.

.....(See gravity table)	
Tomball (see note)*	$1.10
Livingston (Sept. 29, 1933)†	1.00
Cleveland (Jan. 11, 1934)	1.00
Greta (Sept. 29, 1933)	.85
Refugio, light.....(See gravity table)	
Refugio, heavy (June 29, 1935)‡	.80
Markham and High Island .....(See Gulf Coast gravity table)	
Conroe.....(See Conroe gravity table)	
Bosco, La. (Jan. 18, 1935)‖	$ .90

Note—Tomball, effective September 29, by Humble Oil & Refining Co. and October 2 by Magnolia Petroleum Co., and November 10 by Stanolind Crude Oil Purchasing Co.

*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy by Humble Oil & Refining Co. Cleveland (Liberty County) posted by Magnolia Petroleum Co. ‖Bosco posted by Pure Oil Co.

Rocky Mountain States

Ilea, light (Sept. 29, 1933)	$ .96
Ilea, heavy (Sept. 29, 1933)	.90
Florence, Colo. (June 17, 1933)	.80
Fort Collins and Wellington, Colo. (June 17).....(See Salt Creek prices)	
Big Muddy (Sept. 29, 1933)	$1.01
Frannie, light (May 1, 1934)	.70
Frannie, heavy (Sept. 29, 1933)	.62
Salt Creek and LaBarge (Sept. 29, 1933) (See Stanolind Mid-Continent price schedule)	
Grass Creek, light (Sept. 29, 1933)	$1.18
Grass Creek, heavy (Sept. 29, 1933)	.62
Elk Basin (Sept. 29, 1933)	1.18
Rock Creek (Sept. 29, 1933)	1.02
Lance Creek (Dec. 16, 1932)	.92
Hudson (June 2, 1931)	.65
Lost Soldier (Sept. 30, 1933)	.88

(Continued on Page 99)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing firms, include taxes

Taxes

The gasoline quotations given in the following tables include the 1-cent federal tax, as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third grade and a premium grade are also available.

Discounts

Under the standard form of commercial consumer contract which went into effect March 1, 1934, save in California, Oregon, Washington, Arizona and Nevada, a discount of 1 cent a gallon off tank wagon or 3 cents a gallon off retail prices is permitted for purchases running between 4,000 and 10,000 gallons a month, or 4 cents a gallon off retail prices for purchases in lots of more than 10,000 gallons a month. The minimum delivery is 25 gallons.

Standard Oil Co. (Indiana)

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Chicago	15.5	17.5	4.0	9.8
Decatur, Ill.	15.5	16.5	4.0	9.8
E. St. Louis	15.2	17.2	4.0	9.5
Joliet	15.5	17.5	4.0	9.8
Peoria	15.5	17.5	4.0	9.8
Quincy	15.3	17 3	4.0	9.6
Davenport, Ia.	15.5	(†)	4 0	9.8
Des Moines	15.3	(†)	4.0	9.6
Mason City	15 7	(†)	4.0	10.0
Sioux City	15.5	(†)	4.0	9.8
Duluth, Minn.	16.3	18 3	4.0	10 6
Mankato	15.9	17.9	4.0	10.2
Minneapolis	15.9	17.9	4.0	10.2
LaCrosse, Wis.	16.9	18 9	5.0	10 2
Green Bay	17.2	19.2	5.0	10.5
Milwaukee	16.8	18.8	5.0	10.1
Madison	16.9	18.9	5 0	10.2
Detroit, Mich.	16 7	18.7	4.0	9.3
Grand Rapids	16.6	18.6	4.0	10.5
Saginaw	16.8	18.8	4.0	9.3
Evansville, Ind.	17.2	19.2	5.0	10.3
Indianapolis	17.4	19.4	5.0	10 5
South Bend	17.6	19.6	5.0	12.0
Fargo, N. Dak.	16.9	18.9	4.0	11.2
Huron, S. Dak.	17.4	19.4	5.0	8.2
Sioux Falls	16 9	18.9	5.0	10.2
Kan. City, Mo.*	14.9	16.9	4.0	9.2
Springfield	14.6	16.6	4.0	8.9
St. Louis	15.2	17.2	2.5	9.5
St. Joseph*	14.9	16.9	4.0	9.2
Wichita, Kans.	14.4	15.0	4.0	6.3
Bartlesville, Ok.	16.3	18.3	5.0	8.8

*State tax 2 cents, 1-cent city tax and 1-cent federal tax.

†Standard Oil Co. (Indiana) has leased all service stations in Iowa.

Discounts to dealers: Undivided accounts, 1½ cents on premium and regular and 2½ cents on third grade off service station prices; divided accounts one-half cent less than undivided. Discounts to dealers in metropolitan Chicago one-half cent larger than rest of Standard of Indiana territory, namely 4 cents and 3 cents on respective grades. Where prices are more than 1 cent below normal, the discounts are one-half cent less than above.

Stanolex Furnace Oil in Chicago

Effective June 27, 1935, f.o.b. Chicago tank wagon prices: Range oil, less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons and more, 7.0 cents. No. 1 (36-40 lt. stw. zero), less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons or more, 7.0 cents; No. 2 (30-34, stw. zero), same prices and quantities as No. 1; No. 3 (22-26, zero), less than 150 gallons, 7.2 cents; 150 gallons or more, 6.2 cents. No. 4 (12-16 zero), less than 400 gallons, 7.2 cents; 400 gallons or more, 6.2 cents, viscosity of No. 4, 85 and 100° F.; No. 5, less than 400 gallons, 5¾ cents; 400 gallons or more 4¾ cents.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Denver, Colo.	18.0	20.0	5.0	13.0
Pueblo	18.0	20.0	5.0	13.0
Grand Junction	20.5	22.5	5.0	16.0
Casper, Wyo.	18.5	20.5	5.0	11.5
Cheyenne	18.5	20.5	5.0	13.0
Butte, Mont.	21.0	23.0	5.0	17.5
Billings	19.5	21.5	6.0	16.5
Helena	21.5	23.5	6.0	17.5
Great Falls	20.5	22.5	6.0	17.5
Salt Lake, Utah	21 0	23.0	5.0	16 0
Boise, Idaho	22.5	24.5	6.0	18.0
Twin Falls	22.5	24.5	6.5	13.0
Alb'que, N. M.	20.0	22.0	*6.5	12 0

*One-half cent city tax.

Effective March 1, 1934, discount to dealers with or without contract throughout Continental territory: Undivided dealer discount off service station price, 4 cents; divided dealer accounts, 3¼ cents.

Southern District

STANDARD OIL CO. OF KENTUCKY

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Atlanta, Ga.	19.0	21.0	7.0	12.0
Augusta	19.0	20.0	7 0	13 0
Macon	19.5	21.0	7.0	13.0
Savannah	18.5	20.5	7.0	14.0
Birm'ham, Ala.	21.0	23.0	8.0	12.0
Mobile	20 0	22.0	8.0	11.0
Montgomery	22.0	24.0	8.0	13.5
Jackson, Miss.	19.0	21.0	7.0	11.0
Vicksburg	18.5	20.0	7.0	12.0
Jacksonville, Fla.	18.5	20.5	8.0	11.5
Miami	18.5	20.5	8.0	13.5
Pensacola	18.5	20.5	8.0	11.5
Tampa	18.5	20.5	8.0	12.5
Lexington, Ky.	19.5	21.5	6.0	10.0
Covington,	18.0	20 0	6.0	11.5
Louisville	18.5	20.5	6.0	10 0
Paducah	18.5	20.5	6.0	10.0

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2 cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia and Mississippi include 1-cent state tax; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline; in Florida an inspection fee of one-eighth cent on kerosene and gasoline. To Pensacola, Mobile and Birmingham state taxes on gasoline add 1 cent city tax.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Dallas, Tex.	15 0	17.0	5.0	8.0
Fort Worth	15.0	17.0	5.0	8.0
Houston	15.0	17.0	5.0	8.0
San Antonio	16.0	18.0	6.0	8.0
El Paso	17.0	19.0	5.0	10 0
Muskogee, Ok.	16.0	18.0	5.0	8.0
Okla. City	16.0	18.0	5 0	8.0
Tulsa	16.0	18.0	5.0	8.0
Ft. Smith, Ark.	14.5	18 0	5.0	8.5
Little Rock	17.0	20.5	7.5	9.5
Texarkana	15.5	17 5	5.0	8.0

Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Atl'tic City, N. J.	14.0	17.5	4.0	9.0
Newark	13.3	16.8	4 0	7.5
Annapolis, Md.	14.8	18.3	5.0	10.0
Baltimore	14.3	17.8	5 0	8.5
Cumberland	15.8	19.3	5.0	12.7
Wash'g'n, D. C.	12.3	15 8	3.0	9.5
Danville, Va.	16.6	20.1	6.0	12.9
Norfolk	15.1	18 6	6.0	11.3
Petersburg	15.8	19.3	6.0	11.4
Richmond	15.8	19.3	6.0	11.7
Roanoke	16.8	20.3	6.0	12.9
Charles'n, W. Va.	15 0	18.5	5.0	12.6
Parkersburg	14.3	17.8	5.0	11.2
Wheeling	15.5	19 0	5.0	12.2
Charlotte, N. C.	17.5	20.5	7.0	13.5
Hickory	18.7	22.2	7 0	13.7
Mt. Airy	17.5	20.0	7.0	13.8
Raleigh	18.2	21.7	7 0	18.3
Salisbury	16.0	18.0	7.0	13.6
Charleston, S. C.	16.2	19.7	7 0	11.3
Columbia	18.0	21.5	7.0	13.2
Spartanburg	16.75	19.0	7.0	13 5

Effective October 23, tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at regular price less one-half cent. Discount for kerosene, 1 cent off tank wagon price for 25 gallons or more under contract (contract not necessary in Baltimore) except in New Jersey, where no discount is given.

Nebraska

STANDARD OIL CO. OF NEBRASKA

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Omaha	17.9	19.9	6.0	10.1
McCook	18.6	20.6	6 0	10.8
Norfolk	18.3	20.3	6.0	10.5
North Platte	18 7	20.7	6.0	10.9
Scottsbluff	19.4	21.4	6.0	11.6

Note: Discounts to dealers; where service station gasoline prices are (maximum overall, including rent) as follows: Reliance, 2½ cents; Standard Red Crown, 3½ cents; Red Crown Ethyl, 3½ cents.

Where service station gasoline prices are below normal resellers' allowances are reduced one-half of the amount below normal, down to the following (minimum overall, including rent): Reliance, 2 cents; Standard Red Crown, 3 cents; Red Crown Ethyl, 3 cents. Discounts to consumers for tank wagon deliveries covered only by Standard Commercial Consumers Contract, effective January 1, 1935.

Ohio

STANDARD OIL CO. OF OHIO

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Ohio points	17.0	19.0	5.0	*12.5

*Includes state tax of 1 cent, effective July 22.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA

	Gasoline Tank wag.†	Gasoline Post. ret'l.	Gasoline Inc. tax	Kero. tank wag.
San Francisco	16.5	18.5	4 0	11.5
Los Angeles	11.5	13 5	4 0	10.5
Fresno, Calif.	13.0	15.0	4.0	12.0
Phoenix, Ariz.	20.0	22 0	6.0	‡18.0
Reno, Nev.	19.0	21.0	5.0	13 0
Portland, Ore.	19.0	21.0	6.0	13.5
Seattle, Wash.	19.0	21 0	6.0	13.5
Tacoma	19.0	21.0	6.0	13.5
Spokane	22.0	24.0	6.0	16.5

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Prices are at company's plant or depots, as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

‡Includes 5-cent state tax.

Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Philadelphia, Pa.	15.6	17.0	4.0	9.0
Pittsburgh	16.0	18.0	4 0	10 0
Allentown	15.5	17.5	4.0	9.0
Erie	15.0	17.0	4.0	9.0
Scranton	16.0	18.0	4 0	10 0
Altoona	16.0	18.0	4.0	10.0
Dover, Del.	15.5	17.5	4.0	10.0
Wilmington	15.5	17.5	4.0	10.0
Springf'd, Mass.	13 2	16.7	4.0	7.5
Worcester	13.3	14.8	4.0	7 5
Hartford, Conn.	12 3	15 8	3.0	7.0
New Haven	12	15.8	3.0	7.0
Providence, R. I.	12.0	13 5	3.0	7.0

Note—Tank wagon prices are those applicable to consumers purchasing lots of 100 or more gallons in one delivery.

Central South District

STANDARD OIL CO. OF LOUISIANA

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
N. Orleans, La.	17 5	21.0	‡8.0	†13.5
Baton Rouge	16.5	20.0	†7.0	12.5
Alexandria	17 5	21.0	†*8.0	10.5
Lafayette	18.0	21.5	‡*8.0	12.5
Lake Charles	18.0	21 5	†*8.0	12.5
Shreveport	16.0	19.5	†7.0	9.0
Knoxville, Tenn.	19.0	21 5	8.0	14.0
Memphis	18.0	21.5	8.0	11.0
Chattanooga	18 25	20.5	8.0	11.5
Nashville	18.0	20.5	8.0	12 0
Bristol	17 85	20.6	8.0	14.0

*Includes city tax of 1 cent.

‡Includes 2-cent parish tax. †Includes 1-cent parish tax.

Effective October 23, tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at dealer price less one-half cent.

Louisiana kerosene prices include 1-cent state tax.

Canada*

Imperial 3-Star Gasoline
IMPERIAL OIL, LTD.

	Gasoline Tank wag.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Hamilton, Ont.	22.0	25.0	6.0	17.5
Toronto, Ont.	22.0	25.0	6.0	17.5
Brandon, Man.	30.3	33.3	7 0	21 8
Winnipeg, Man.	28.7	31.7	7.0	20.2
Regina, Sask.	30.0	33.0	7.0	21.5
Saskatoon, Sask.	32.8	35 8	7 0	24.3
Edmonton, Alta.	32.2	35.2	7.0	23.7
Calgary, Alta.	29.5	32.5	7.0	21.0
Vancouver, B. C.	27.0	30 0	7.0	24 0
Montreal, Que.	18.5	29.5	6.0	17.0
St. John, N. B.	26.0	38.0	8.0	19.5
Halifax, N. S.	26.0	30.0	8.0	19.5

*Imperial gallon used in Canada.

Maritime provinces, all dealers 4 cents off service station price. Montreal, all dealers 2 cents off service station price. All other provinces open dealers 3 cents per gallon off service station price, 1 cent additional to 100 per cent accounts.

New York and New England

SOCONY-VACUUM CO., INC.

	Gasoline Post. deal.	Gasoline Serv. sta.	Gasoline Inc. tax	Kero. tank wag.
Albany, N. Y.	14.2	17.7	5.0	7.5
*Met. New York	14.55	18.3	5.0	7.25
*Br'kl'n, Queens	14.3	17.8	5.0	7.25
Buffalo	14.0	17.0	5.0	8.0
Rochester	15 0	18.5	5.0	8.5
Syracuse	14.5	18.0	5.0	8.5
Boston, Mass.	12.0	14 5	4.0	7 0
Portland, Me.	14.5	18.0	5.0	7.5
Manch'ter, N. H.	14.8	18.3	5.0	8 25
Burlington, Vt.	16.2	19.7	5.0	8.5

*Includes 2 per cent city sales tax.

Naphtha

STANDARD OIL CO. (INDIANA)

	Tank wagon*
Oleum spirits	15.7
V.M.&P. naphtha	16.0
Cleaners' naphtha	15.0
Stanisol	15.0

*Prices include 3-cent Illinois tax, but not 1-cent federal tax nor 2 per cent retail occupational tax.

Prices f.o.b. Chicago, March 12, 1935. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Retail Price Changes

Regular-grade gasoline, kerosene

Standard Oil Co. of Indiana, June 17, advanced station gasoline 1.1 cents in Wichita.

Standard Oil Co. of New Jersey, June 25, reduced tank wagon and station gasoline .3 cent in Roanoke; June 26, advanced them .3 cent.

Atlantic Refining Co., June 6, reduced station gasoline 2 cents in Providence. June 26, reduced station gasoline 2 cents in Worcester. July 1, reduced tank wagon kerosene 1 cent in Allentown and .5 cent in Hartford; advanced it 1 cent in Wilmington.

Standard Oil Co. of Louisiana June 25, reduced tank wagon kerosene 1.5 cents in Nashville.

Continental Oil Co., July 1, advanced tank wagon and station gasoline 1 cent in Pueblo.

Standard Oil Co. of California, July 1, reduced tank wagon and station gasoline 1 cent in Los Angeles. July 3, reduced tank wagon and station gasoline 4 cents in Fresno.

Magnolia Petroleum Co., July 5, advanced tank wagon and station gasoline 1 cent in San Antonio.

Crude Oil Price Changes

Stanolind Crude Oil Purchasing Co. effective July 1, posted the regular Gulf Coast prices for crude in the South Houston Pool in Harris County, Texas. The company has been paying the Gulf Coast schedule in the Hastings Pool in Brazoria County since March 1.

Whitwell to Louisiana

SHREVEPORT, La., July 8.—Creation of an exploration department in Louisiana and Arkansas, was announced by Standard Oil Co. of Louisiana. The new department will be managed by E. V. Whitwell, formerly chief geologist for the Carter Oil Co., Tulsa.

"Due to an oversupply of crude," the official announcement said, "the producing department of the Standard Oil Co. of Louisiana has been more or less inactive for four or five years, but the company feels there may be undiscovered fields in Louisiana and Arkansas and has established the new department for the purpose of making surveys and examinations looking to the discovery of new fields."

Irregularity in Chicago Area Is Now Less Disturbing

By SPECIAL CORRESPONDENT

CHICAGO, July 8.—Somewhat better weather is giving the refinery gasoline market the first real let-up it has had, generally, from either cool weather or excessive rainfall in many weeks in the Middle West. Gasoline consumption over the holiday and shortly thereafter apparently was much improved and the trade has been feeling better over gallonage, present and prospective.

Considerable irregularity has been apparent in the market the last week or two, not all of it yet removed, although there are signs this is less disturbing than a few days ago. Following the holiday, jobbers came into the market for fairly good quantities of material on both contract shipping instructions and spot market orders. A good many jobbers let their stocks fall to such levels they are in continual danger of absolute exhaustion. Such jobbers were anxious for gasoline around the end of the week, and some were willing to pay a slight premium for material in transit.

Urge Conservative Basis

There is sharp division of opinion on the outlook. The general feeling is that, with real summer weather the market should do well. If weather remains unseasonable a good many think refinery runs should be curtailed to assure continuation of stability. Some more experienced observers have been advocating a definite reduction of refinery runs and gasoline production, of say, 4 to 5 per cent in each case. They believe refinery runs should not be higher than 2,500,000 bbls. daily.

As a whole, the gasoline market remains in a condition of balance. A certain small amount of low grade motor fuel has been offered slightly below the going level, and there have been hints of a little regular gasoline also offered a shade easier. But for the most part the tank car gasoline structure is not greatly disturbing at the moment.

Kerosene

Kerosene has run into its quiet season without having been able to catch up on the potential business it might have had because of bad weather. Prices quoted indicate it is barely holding its own after its recent decline. While total stocks probably are not excessively large, it is offered by numerous sellers, making for an uncertain and unsteady market situation. Tractor fuels are quiet and inactive.

Heating Oils

Heating oils are believed by some as near a stage which can be considered stabilization. Some distributors are willing to give consideration to stocking up for fall and winter, although they are talking prices fractionately below the current market. Some purchases of fairly decent proportions are reported made.

Heavy Oils

The industrial oil business remains slow. Price conditions governing this business are none too strong, although no extensive weakness is noted.

Lubricants

Lubricants for the most part are mixed, and in a slow market. No special revival of interest has been noted. Finished motor oils have been moving fairly well recently.

Wax

Wax is dull and showing no particular feature. Stocks remain around levels which suggest amplitude, on the basis of the current purchases.

Naphthas

Naphthas have shown no change, but the market holds its own, despite continued under-pricing from some quarters.

Coke

Coke business is seasonally quiet.

Crude Oil Prices

(Continued from Page 97)

Hamilton Dome, all grades (Feb. 16, 1935)	.57
Torchlight (Sept. 29, 1933)	1.18
Greybull (Sept. 29, 1933)	1.18
Pondera (Sept. 29, 1933)	1.25
Sunburst (Sept. 29, 1933)	1.35
Cat Creek, Montana	1.07
Hogback (Sept. 29, 1933)	1.11
Lea County, N. Mex. (Sept. 29, 1933)	.75
Maljamar (Sept. 29, 1933)	.70
Artesia-Jackson (Dec. 1, 1933)*	.75

Note—Salt Creek, Torchlight, Elk Basin, Grass Creek, Frannie, Greybull, Hogback and Iles by Stanolind Oil & Gas Co. Elk Basin, Grass Creek light, Big Muddy, Rock Creek and Sunburst by Ohio Oil Co. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Lea County, effective September 29, 1933, by Humble Oil & Refining Co. and other buyers; Fort Collins, Wellington, Orchard, Florence, Big Muddy, Cat Creek, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro. Hamilton Dome, Wyo., by Stanolind Oil & Gas Co. Pondera, Mont., by Ohio Oil Co. (Stanolind Oil & Gas Co., effective January 1, 1915, posted $1 per barrel in Pondera).

*Continental Oil Co.

Middle Western States

OHIO OIL CO

Lima (Feb. 1, 1935)	$1.15
Illinois (Jan. 5, 1934)	1.13
Princeton, Ind. (Jan. 5, 1934)	1.13
Plymouth	Shut in
Midland, Mich. (Sept. 30, 1933)*	$1.02
West Branch, Mich.	.86
Oceana, Mich (Oct. 5, 1933)	.90
Somerset, Ky. (May 20, 1926)	1.13
Western Kentucky (May 22, 1935)	1.13

*Posted by Pure Oil Co. and Simrall Pipe Line Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted prices. West Branch, Mich., posted by Simrall Pipe Line Co. Somerset, Ky., crude purchased by Ashland Refining Co. Ashland, Ky., and posted prices includes premium. Oceana posted by Old Dutch Refining Co. and Naph-Sol Refining Co.

Eastern States

TIDE WATER PIPE CO.
(Effective May 16, 1935)

Bradford, Pa.	$2.20
Allegany, N. Y.	2.20

SOUTH PENN OIL CO.
(Effective May 16, 1935)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field)	$2.20
Pennsylvania Grade Oil in Southwest Pennsylvania Lines	1.92
Pennsylvania Grade Oil in Eureka Pipe Line lines	1.87
Pennsylvania Grade Oil in Buckeye Pipe Line lines	1.77
Corning Grade Oil in Buckeye Pipe Line Co.'s lines	1.32

PENNZOIL CO.
(Effective May 16, 1935)

Pennsylvania Grade Oil in National Transit Lines:	
Group A	$2.17
Includes Cochran, Franklin, Hamilton and Doolittle districts.	
Group B	2.16
Includes Titusville district.	
Group C	2.15
Includes Turkey and Tidioute districts.	
Group D	2.14
Includes Bear Creek and Porkey districts.	
Group E	2.11
Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredlin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacey and Kinsua districts.	

Price depends on length of pipe line haul to plant at Oil City.

PURE OIL CO
(Effective May 16, 1935)

Cabin Creek, W. Va.	$1.87
Bradford Hollow, W. Va.	1.87
Kelly Creek, W. Va.	1.87

Canada

Ontario (Sept. 9, 1933):	
Petrolia*	$2.10
Oil Springs	2.17
Turner Valley (May 21, 1934):†	
Clear naphtha	2.55
Discolored naphtha	2.37
Crude oil, 50 gravity	2.19
Crude oil, 45 to 49.9	2.07
Crude oil, 40 to 44.9	1.50

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

Mexico

Panuco*	$.955

*F.o.b. ship, based on May transactions and exclusive of production and export taxes and bar dues.

Crude Oil Gravity Prices

Gravity—	Oklahoma and Kansas 1	North Texas, Central Texas and East Central Texas 2	North Louisiana and Arkansas 3	Gray County, Texas 4	Carson, Hutchinson and Moore Counties, Texas 5	Conroe, Texas 6	Salt Creek, Wyo. 7	Gulf Coast, Texas and Louisiana 8	Gulf Coast, Texas and Louisiana 9	Cotton Valley, Louisiana 10
Below 20	....	....	....	....	....	....	....	$.82	$.82	....
20-20.9	....	....	....	....	....	....	....	.84	.84	....
21-21.9	....	....	....	....	....	....	....	.86	.86	....
22-22.9	....	....	....	....	....	....	....	.88	.88	....
23-23.9	....	....	....	....	....	....	....	.90	.90	....
24-24.9	....	....	....	....	....	....	....	.92	.92	....
Below 25	*$.76	....	....	....	....	....	....	....	....	$.70
25-25.9	*.78	....	....	....	....	....	....	.94	.94	.72
26-26.9	*.80	....	....	....	....	....	....	.96	.96	.74
27-27.9	*.82	....	....	....	....	....	....	.98	.98	.76
28-28.9	*.84	....	....	....	....	....	....	1.00	1.00	.78
Below 29	.84	$.79	$.79	....	....	....	$.84	....	....	....
29-29.9	.86	.81	.81	....	....	....	.86	1.02	1.02	.80
30-30.9	.88	.83	.83	....	....	....	.88	1.04	1.04	.82
31-31.9	.90	.85	.85	....	....	....	.90	1.06	1.05	.84
32-32.9	.92	.87	.87	....	....	....	.92	1.08	1.06	.86
33-33.9	.94	.89	.89	....	....	....	.94	1.10	1.07	.88
34-34.9	.96	.91	.91	....	....	....	.96	1.12	1.08	.90
Below 35	....	....	....	$.79	$.69	....	....	....	....	....
35-35.9	.98	.93	.93	.81	.71	$1.09	.98	1.12	1.09	.92
36-36.9	1.00	.95	.95	.83	.73	1.11	1.00	1.12	1.10	.94
37-37.9	1.02	.97	.97	.85	.75	1.13	1.02	1.12	1.11	.96
38-38.9	1.04	.99	.99	.87	.77	1.15	1.04	1.12	1.12	.98
39-39.9	1.06	1.01	1.01	.89	.79	1.17	1.06	1.12	1.13	1.00
40 and over	1.08	1.03	1.03	.91	.81	1.19	1.08	1.12	1.14	1.02

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA

For current purchases of crude oil at the well (unless otherwise specified) (All gravities above those quoted take highest price offered in that field)
(Effective September 6, 1933)

Gravity—	Long Beach	Seal Beach, Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda, Brea Canyon	Athens-Rosecrans	Torrance	Richfield	Whittier, La Habra	Montebello	Santa Fe Springs La Habra-Coyote		Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Coalinga	Coyote
14-14.9	$.65	$.65	$.65	$.65	$.65	$.65	....	$.65	$.66	$.65	$.65	....	$.65	$.57	$.57	$.57	$.65
15-15.9	.65	.65	.69	.69	.66	.69	....	.66	.65	.65	.65	....	.65	....	....	....	.65
16-16.9	.66	.65	.72	.73	.69	.73	....	.69	.67	.68	.65	....	.65	....	....	....	.65
17-17.9	.69	.65	.75	.76	.73	.76	....	.72	.70	.71	.65	....	.68	....	....	....	.68
18-18.9	.72	.65	.78	.80	.76	.79	....	.75	.74	.74	.65	....	.71	.61	.61	.69	.71
19-19.9	.75	.65	.81	.83	.80	.82	....	.78	.78	.78	.65	....	.74	.64	.65	.62	.74
20-20.9	.78	.68	.83	.87	.83	.85	....	.81	.82	.81	.66	....	.78	.67	.69	.65	.78
21-21.9	.81	.72	.86	.90	.87	.88	....	.83	.85	.84	.69	$.72	.81	.70	.73	.68	.81
22-22.9	.84	.76	.89	.94	.90	.92	....	.85	.89	.87	.72	.76	.84	.73	.76	.72	.84
23-23.9	.88	.81	.92	.97	.94	.95	$.83	.89	.92	.90	.76	.79	.87	.77	.79	.75	.87
24-24.9	.91	.85	.95	1.01	.97	.98	.86	.92	.97	.93	.80	82	.90	.81	.82	.78	.90
25-25.9	.94	.89	.98	....	1.00	1.01	.90	.95	1.00	....	.85	.87	.93	.85	.85	.81	.93
26-26.9	.97	.93	1.01	....	1.04	1.04	.94	.98	1.04	....	.89	.90	.96	.89	.88	....	.96
27-27.9	1.00	.98	1.04	....	....	1.07	.97	....	1.08	....	....	.94	.99	.93	.91	....	.99
28-28.9	1.03	1.02	1.07	....	....	1.10	1.01	....	1.11	....	....	.98	1.02	.97	.94	....	1.02
29-29.9	1.06	1.05	1.09	....	....	....	1.04	....	1.15	....	....	1.01	1.05	1.01	.97	....	1.06
30-30.9	1.09	1.10	1.12	....	....	....	1.08	....	....	....	....	1.05	1.09	1.05	1.00	....	1.09
31-31.9	....	....	....	....	....	....	1.12	....	....	....	....	1.08	1.12	1.09	....	....	1.12
32-32.9	....	....	....	....	....	....	1.15	....	....	....	....	1.12	1.15	1.13	....	....	1.15
33-33.9	....	....	....	....	....	....	....	....	....	....	....	1.16	1.18	1.17	....	....	1.18
34-34.9	....	....	....	....	....	....	....	....	....	....	....	1.19	1.21	....	....	....	1.21
35-35.9	....	....	....	....	....	....	....	....	....	....	....	1.23	....	....	....	....	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	1.26	....	....	....	....	....
37-37.9	....	....	....	....	....	....	....	....	....	....	....	1.30	....	....	....	....	....
38-38.9	....	....	....	....	....	....	....	....	....	....	....	1.34	....	....	....	....	....

Market Record of Active Oil Stocks Listed on New York Stock Exchange

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City. Members New York Stock Exchange and New York Curb Exchange

1935 High	1935 Low	Week ended July 6 Sales	Week ended July 6 High	Week ended July 6 Low	Week ended July 6 Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
70¾	48½	2,700	65½	63½	64¼	Amerada Corp.	788,675	N.P.	50cQ	7-31-35	$2.00	55⅝	39	47⅝	18½
28	21⅝	5,500	26⅝	26	26	Atlantic Refining	2,664,904	$25	25cQ	6-15-35	1.00	35¼	21½	32½	12⅝
10⅜	5⅞	3,800	8½	8¼	8¼	Barnsdall Corp. A	2,195,397	$5	....	5-11-31	....	10	5⅞	11	3
8¼	3⅜	59,400	8¼	7⅛	7⅞	Columbia Gas & Elec.	11,610,036	N.P.	....	5-15-34	‡ .25	19¼	6⅝	28⅛	9
10½	6½	17,600	8⅜	8	8¼	Consolidated Oil Corp.	13,996,072	N.P.	14c	10-31-34	.42	14¼	7⅛	15¾	5
23	15⅛	16,900	21⅞	20⅞	21⅝	Continental Oil of Delaware	4,682,722	$5	12½c	4-30-35	.50	22⅜	15¾	19⅝	4⅞
19¼	11⅜	4,600	18¾	17¾	18	General Asphalt	387,149	$10	....	6-15-32	....	23½	12	27	4⅝
3⅜	1½	400	2¾	2¼	2¼	Houston Oil (new)	1,098,618	$25	....	10-17-30	....	5⅝	2½	7⅜	1⅞
1⅞	½	1,100	⅝	½	½	Louisiana Oil Refining	1,302,158	N.P.	....	.....	....	3⅜	¾	4	⅝
13⅞	9½	3,400	12½	11⅝	11¾	Mid-Continent Petroleum	1,857,912	$10	15c	5-15-35	.50	14⅜	9⅛	16	3¾
19	9	2,100	16¾	15¾	16⅛	National Supply of Delaware	382,591	$25	....	5-15-31	....	21⅛	10	28⅝	4
14⅛	9¼	4,100	11⅞	11½	11⅝	Ohio Oil Co.	6,563,107	N.P.	15c	6-15-35	.45	15⅞	8½	17⅝	4¾
9½	7	100	7¾	7¾	7¾	Pacific Western Oil	1,000,000	N.P.	40c	11-30-34	.40	9⅜	5½	9½	3
1⅜	⅝	400	¾	¾	¾	Panhandle P. & R.	198,770	N.P.	....	.....	....	2½	⅝	4¼	⅜
23	13¾	9,500	21⅝	21	21⅜	Phillips Petroleum	4,153,235	N.P.	25c	6-1-35	1.00	20¾	13⅜	18¾	4¾
11⅝	6½	2,500	9¼	8⅞	8⅞	Plymouth Oil Co.	1,014,082	$5	25c	3-30-35	75c & 4% Stk.	16¾	7¼	17⅝	6¾
9¼	5⅜	9,000	9⅛	8¾	8⅞	Pure Oil Co.	3,038,370	N.P.	....	9-1-30	....	14⅞	6⅛	15⅜	2½
43¼	29½	800	42	41⅝	42	Royal Dutch N. Y. shares	432,224	$14	$1.35	7-31-34	1.35	39⅛	28⅝	39¾	17⅝
35⅞	20¾	1,700	30½	30	30	Seaboard Oil of Delaware	1,204,460	N.P.	15cQ†	6-15-35	1.00	38⅜	20¾	43⅜	15
11½	4½	7,600	10⅜	9¾	10¼	Shell Union Oil	13,070,625	N.P.	....	6-30-30	....	11½	6	11⅝	4
97	63⅛	700	94⅝	91¾	94⅝	Shell Union Oil pfd.	400,000	$100	....	7-1-31	....	89	57	61	28½
18¾	5¼	2,500	15⅝	5¼	5½	Simms Petroleum	461,608	$10	$10 liq.	7-5-35	.55	17⅛	7¼	12⅜	4⅞
11⅜	6½	400	10¼	10	10⅛	Skelly Oil	1,008,514	$25	....	12-15-30	....	11½	6	9⅞	3
15¾	11	37,300	13¼	12⅝	13	Socony-Vacuum	31,154,379	$25	15cQ	3-15-35	.60	19⅞	12½	17	6
38¾	27¾	7,600	35	33¾	34½	Standard Oil of California	13,102,900	N.P.	25c	6-15-35	1.00	42⅞	26½	45	19½
27¼	23	9,600	25⅝	25¼	25½	Standard Oil (Indiana)	15,215,677	$25	25cQ	6-15-35	1.00	32¾	23¼	34	17
32	26½	No sales ..	..	..	..	Standard Oil of Kansas	200,000	$10	50cQ	10-31-34	2.00	41	26	39⅞	12¾
50½	35¾	21,300	48½	46⅞	47½	Standard Oil of New Jersey	25,856,081	$25	50c8A‖	6-15-35	1.25	50⅛	39¼	47½	22¾
75½	60½	400	71½	71	71½	Sun Oil	1,733,013	N.P.	25cQ	6-15-35	$1 & 9% Stk.	74¼	51½	59	35
23¾	16½	14,700	20¼	19⅞	19⅞	Texas Corp.	9,486,417	$25	25cQ	7-1-35	1.00	29⅞	19⅝	30⅛	10¾
5½	3¼	13,900	5½	4⅞	5½	Texas Pacific Coal & Oil	880,703	$10	....	12-31-29	....	6½	2½	6½	1⅜
12	7⅝	4,500	10½	10¼	10½	Tide Water Associated	5,631,341	N.P.	....	2-16-31	....	14⅜	8	11¾	3⅛
102¼	84	1,100	99	98	99	Tide Water Associated pfd.	666,524	$100	$3§	7-1-35	§8.50	87	64½	65¼	23½
20¼	14¾	6,500	18	17½	17¾	Union Oil of California	4,386,070	$25	25cQ	5-10-35	1.00	20½	11½	23⅜	8½
26¼	20⅞	1,000	24	23¼	23½	Union Tank Car Co.	1,200,000	N.P.	30cQ	6-1-35	1.20	25⅜	15⅝	22⅜	10½
2⅝	1	100	1¾	1¾	1⅞	Wilcox Oil & Gas	424,839	$5	....	5-10-28	....	5¾	2	5½	2

*Ex-dividend. †Plus extras. ‡Payable in preferred stock. §On account of accumulated and current dividends. ‖Dividend 4/75 Mission Corp. paid 3-15-35. ¶Dividend of one-half share Barnsdall Refining Corp

Market Record of Active Oil Stocks Listed on New York Curb

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1935 High	1935 Low	Week ended July 6 Sales	Week ended July 6 High	Week ended July 6 Low	Week ended July 6 Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
39	30½	50	39½	39½	39½	Buckeye Pipe Line Co.	200,000	$50	75cQ	6-15-35	$3.00	38	26	39¾	25
4¼	1⅝	1,100	2⅞	2½	2⅞	Carib Syndicate	799,020	25c	....	.....	....	5½	1½	7¾	¼
157	115	50	131	131	131	Chesebrough Mfg. Co.	120,000	$25	$1Q†	6-28-35	11.50	150	116	129	71
2¼	¾	34,100	2	1½	1⅞	Cities Service	37,804,394	N.P.	....	6-1-32	....	4¼	1¼	6¼	1½
1¼	½	1,800	¾	½	¾	Colon Oil	2,200,000	N.P.	....	.....	....	3¼	½	4	¼
⅞	¼	900	⅜	¼	¼	Cosden Oil	399,687	$1	....	.....	....	3⅞	½	3⅞	1⅜
18⅞	10	4,200	17¾	16⅞	17½	Creole Petroleum	6,974,356	$5	....	.....	....	14⅜	9⅝	12	4¾
6⅝	4¼	200	5⅞	5⅝	5⅝	Darby Petroleum	509,696	$5	25c	7-15-35	.50	7½	4⅛	8	2⅛
2	¾	No sales ..	..	..	..	Derby Oil & Refining	263,162	N.P.	....	.....	....	2¼	1	2¾	⅞
38	34	No sales ..	..	..	..	Eureka Pipe Line	50,000	$50	$1Q	8-1-35	4.00	37	30	41¾	20
74¾	50¼	1,400	65¼	63	64	Gulf Oil Corp.	4,538,101	$25	....	10-1-31	....	76¾	49¾	62	24
64	44	3,400	58¼	57	57⅞	Humble Oil & Refining (new)	8,923,935	N.P.	25cQ	7-1-35	§1.25	49½	33¼	105½	40
22½	15⅝	7,100	20	19¼	19⅞	Imperial Oil of Canada	26,919,871	N.P.	25c8A†‡	6-1-35	.92½	17⅞	12⅝	15⅞	6½
6	3⅝	100	5⅜	5⅜	5⅜	Indiana Pipe Line	300,000	$10	15c8A	5-15-35	.35	6⅞	3⅝	8	3⅛
39¾	28	6,300	35½	34⅜	35½	International Petroleum	14,247,088	N.P.	75c8A†‡	6-1-35	2.28	33⅜	19⅜	23½	8⅞
9½	4⅜	3,100	7⅛	7⅛	7⅛	Louisiana Land & Exp.	3,000,000	N.P.	....	.....	....	5	2⅛	2¼	⅝
6¾	3½	200	5	5	5	Lion Oil Refining	270,000	N.P.	....	10-27-30	....	6	3⅜	9½	1¼
6¼	4½	3,600	6	5¼	6	Lone Star Gas	5,382,723	N.P.	15c	2-15-35	‖ .16	8⅜	4¼	11⅞	4¾
5½	4¼	200	5¼	5	5¼	Mountain Producers	1,682,182	$10	15cQ	7-1-35	.60	5½	4	6½	2½
18⅛	11¾	1,000	17⅝	17½	17⅝	National Fuel Gas	3,810,183	N.P.	25cQ	7-15-35	1.00	18⅛	13⅛	20	10
9¼	6¾	300	8¾	8½	8¾	National Transit	509,000	$12.50	40c8A	6-15-35	.75	9½	7	10	5½
2¾	2	700	2¼	2¼	2¼	New Bradford Oil	1,445,202	$5	10c8A	3-15-35	.20	2½	1¾	2⅛	½
2⅛	1	500	1⅝	1½	1⅝	New Mexico and Arizona	1,000,000	$1	....	.....	....	2¾	1	1⅞	½
3¾	3	100	3½	3½	3½	New York Transit	100,000	$5	15c8A	4-15-35	.30	4¾	3	4⅞	3
7	5¼	No sales ..	..	..	..	Northern Pipe Line	120,000	$10	25c8A	7-1-35	.50	7	4⅝	6⅛	4¼
2⅛	1¾	5,000	2	1¾	1⅞	Pantepec Oil	1,608,700	N.P.	....	.....	....	2⅝	⅞	3¾	½
1½	⅝	100	⅞	⅞	⅞	Ryan Consolidated	296,931	N.P.	....	.....	....	3⅜	⅞	4¼	⅝
7½	5½	1,100	7⅛	7	7⅛	Salt Creek Producers	1,496,859	$10	20cQ	8-1-35	.80	7⅞	5½	9¼	3½
28⅜	21⅝	200	25	24⅞	25	South Penn Oil	1,200,000	$25	30cQ	6-20-35	1.20	28½	17½	22⅛	11
4¾	3⅞	200	4¼	4¼	4¼	Southern Pipe Line	100,000	$10	15c8A	3-1-25	.25	5½	3½	6	2⅛
52½	45¼	No sales ..	..	..	..	Southwest Penna. Pipe Lines	35,000	$50	$1Q	7-1-35	5.00	47	41	43	24½
21⅝	18	3,700	21½	21¼	21⅜	Standard Oil of Kentucky	2,604,790	$10	25cQ†	3-15-35	1.50	18⅜	14⅝	19¼	8⅜
12	7¾	300	10	9⅞	10	Standard Oil of Nebraska	188,403	$25	....	6-20-34	.50	16⅞	8¼	20½	11
19¾	11½	200	16¼	16	16	Standard Oil of Ohio	753,740	$25	....	1-3-33	....	28½	12¼	41	15½
1¼	⅜	5,100	1⅛	1⅛	1⅛	Sunray Oil	1,610,810	$1	....	4-15-31	....	2	⅛	1½	¼
6⅞	5	1,500	6	5⅝	5⅝	Texon Oil & Land	336,028	N.P.	15cQ	6-29-35	.90	11	4⅜	13¾	6¼

*Ex-dividend. †Plus extras. ‡Payable in Canadian funds. §Includes 50 cents on old $25 par value stock. ‖Payable in preferred stock.

Note—In comparing highs and lows for the several years in the two tables, it will be necessary to take into consideration cases where there have been stock split-ups.

NEW OR IMPROVED EQUIPMENT

Bulletins, Booklets and Other Literature for the Trade

A bulletin issued by Emsco Asbestos Co., 206 South Crawford Street, Downey, Calif., and taking the form of "An Open Letter to the Oil Industry," announces Emsco rotary brake lining.

Folder No. 1414, issued by Link-Belt Co., Philadelphia, Pa., covers a line of portable belt conveyors for industrial plants, contractors, etc., for handling loose or bagged bulk material.

Bronzoid Lead Corp., Magnolia Building, Dallas, Tex., has issued a folder devoted to Bronzoid treated lead, a new process of obtaining better lead distribution in materials from which bearings, bushings, etc., are made.

The third edition of the Timken Engineering Journal has been issued by the Timken Roller Bearing Co., Canton, Ohio. Copies may be obtained by engineers, designers, libraries and executives. This 260-page publication is a series of 8½x11-inch loose leaves, bound. Complete data are given on Timken shims, locknut and washer assemblies, annular groove closures, tubes, etc.

Bulletin No. 1, by Industrial Engineers, Inc., Los Angeles, Calif., is an eight-page publication of "Graphical Measurement of Vapor Pressure."

Alemite Corp., Chicago, announces the revised mid-year 1935 Alemite powergun equipment catalog.

A folder offered by Ideal Commutator Dresser Co., Sycamore, Ill., covers the company's combination Testlite and fuse-puller with flexible leads.

Paste Gauges Liquid Level of Volatile Petroleum Oils

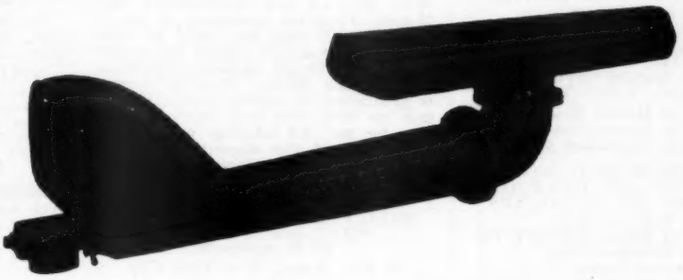
Petroleum Specialty Co., Box 785, Station H, Los Angeles, Calif., has placed on the market Gage-o gasoline paste, for refinery, tank farm and terminal gauging. It is a companion product of Gage-o water finding paste. Gage-o gasoline paste is designed to gauge the liquid level in tanks of volatile petroleum oils such as naphthas, and casinghead—or butane—blended gasolines, which evaporate from the gauge tape before the tape can be drawn out of the tank and accurately read.

The paste is dark blue. When immersed in gasoline, that part below the gasoline level turns white, while that above the gasoline level remains dark blue, thus giving a definite line at the liquid level. The action of this paste is just as positive and gives just as accurate a line as does the water-finding paste. The vapors above the liquid level which may condense on the tape will not affect the color because actual immersion in gasoline is necessary for the color change. The paste will not wash off the tape even though left in the tank much longer than necessary.

Miller Develops New Oil Field Gas Burner

Miller Fuel Engineering Co., Inc., Houston, Tex., announces the Miller oil-field gas burner, made in one size only, which premixes gas with a large percentage of air before entering the firebox and which is fired on wet gas as readily as dry gas.

This improved design has only one orifice for easier gas control. The burner capacity is governed entirely by the gas flow through the ventura, enabling the user to avoid the carrying of various sizes in stock.



The manufacturer asserts this type of burner develops higher flame temperature, due to primary air ratio, permitting higher ratings without the use of stack blowers. The burner is below the firebox, keeping combustion space free to utilize the full firebox for flame.

This burner is of cast iron, with the exception of the manifold, which is of a special heat-resisting alloy. Gas is admitted in the front of the mixing tube, inspirating air from the outside and drawing it into the tube for mixture with the gas before leaving the burner parts.

Improved Fire Pump

An improved line of underwriter-approved, centrifugal fire pumps is announced by Worthington Pump & Machinery Corp., Harrison, N. J. These pumps are the company's group LG, single-stage, volute type. They are built for direct connection with electric motors, Diesel, gas or gasoline engines, or steam turbines and, using the smallest approved drivers in each instance, they occupy minimum location space, a point of importance to building owners.

Processing engineers with the exacting problem of maintaining precision control of temperature, pressure, rate of flow or liquid level on continuous processes which involve time lags and load changes, should get Bulletin 37R announced by Taylor Instrument Cos., Rochester, N. Y.

A new idea in the construction of portable electric tools is embodied in the Wodack "Do-All" combination electric hammer and drill. The hammer mechanism contains only two working parts, both made of specially treated steels to give long life. The tool may be operated from any light socket. By simply opening the chuck and loosening a cap screw, the hammer member may be removed and the tool used as an electric drill, with a capacity of three-eighths inch in metal. It may also be used as a portable grinder and buffer. This combination tool is manufactured by Wodack Electric Tool Corp., 4627 West Huron Street, Chicago.

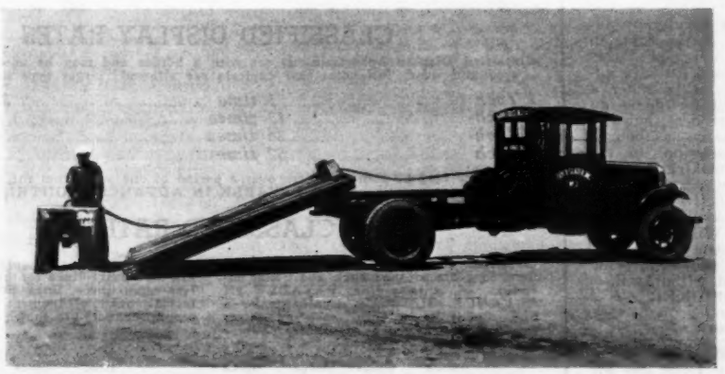
More Truck Usefulness

A development, by Davey Compressor Co., Inc., Kent, Ohio, increases the usefulness of the motor truck. This device is the Davey power take-off, first employed in driving an air compressor mounted on truck chasis, by means of the truck motor itself. It is equally adapted for operating other kinds of truck-mounted machinery, such as pumps, portable generating plants for lighting systems, arc welders, etc., and its uses are increasing. The power take-off operates from the truck drive shaft by a clutch and is controlled from the driver's cab.

Five new catalogs are announced by Ross Heater & Manufacturing Co., Buffalo, N. Y.: Sterling oil section catalog, form 1,037; Ross expansion joint catalog, form 1,039; Arco metal pipe catalog, form 1,040; Ross storage tank heater catalog, form 1,041; and the Ross Decalorator (steam jet refrigeration) catalog, form 1,043.

Sliding Truck Bed Simplifies Hauling Jobs

A piece of equipment which its promoters say promises to revolutionize heavy oil-field hauling is the sliding truck bed. The bed is permanently a part of the truck chassis when down for loading or when up in position. The weight shown in the accompanying picture, 5,800 pounds, is said to have been loaded and unloaded by one man in less than two minutes. The bed is designed to load and unload any weight to the maximum capacity of the truck. It is manufactured by Guy P. Slater, Inc., Sand Springs, Okla., and marketed by the Sliding Truck Bed Co., Sand Springs. Time consumed in loading and unloading heavy machinery, such as compressors, pumps, separators, caterpillars, engines and tanks, has been reduced to a few minutes, and danger of breakage or accidents has been reduced, Mr. Slater says.



The truck bed is securely bolted to the truck frame, and travels on a sliding reach, sliding from the chassis to rest the rear end on the ground near the object to be loaded. A winch line is put around the piece and the motor pulls it over to rest on the bed. Continuing the pull, the object rests on the bed as it is pulled back onto the truck chassis in horizontal position.

The bed is built on two 5½-inch 20-pound pipe runners. The cross members are 3½-inch 7½-pound pipe placed about three feet apart, depending on size of truck and length of bed. The tracks for the runners are 7-inch 24-pound pipe, and the cross members are 4-inch channel iron reinforced with wood for friction, and bolting to the truck frame.

CLASSIFIED ADVERTISING

Royalties—Production

HAVE MARKET FOR
SUBSTANTIAL
PRODUCING ROYALTIES

Exceptionally high immediate return not essential—prefer properties partially developed with excellent future—must be priced right.

We file all requirements with Federal Securities Commission and convert your royalties into cash promptly.

JAMES B. McANALLY
Tulsa, Oklahoma.

PRODUCING OIL ROYALTIES
Bought (Wholesale) Sold.
Inquiries invited from Oil Companies, Bankers, Dealers.
M-K OIL COMPANY, INC.
20 Broad St. New York.

VAN POOL — EAST TEXAS
Bought — Sold — Wholesale.
W. R. Brown & Co., Inc.
14 Prospect St., East Orange, N. J.

HIGH GRADE producing oil and gas royalties offered to dealers. Billie Smallwood, P. O. Box 2261, Tulsa, Okla.

WILL sell royalty or give interest in 6500 acre tract, in Bureau County, Illinois, for funds to complete well, already started. Excellent possibilities. EARL HARRINGTON, Princeton, Illinois.

IN THE four years that I have been buying and selling oil royalties and leases I have not bought or sold any that have not produced and have paid as high as 250% profit buying back oil properties from customers.

I can offer royalties in Van and East Texas from $400 an acre up. I have one lease in Upshur County of forty acres with a well on one end of the farm that I will sell at $200 an acre cash or $100 an acre cash and $250 an acre out of oil.

I still have sixty acres of royalty that I am willing to sell on the edge of Wheeler County, over the line in Collingsworth County. The Smith Brothers of McLean, Texas, who are drilling this well, have drilled nineteen wells in the field, all of them producers. The price on the sixty acres is $32 an acre base, or $4.00 an acre for ⅛ of the ¼ royalty, as long as it lasts. Have sold the other sixty-five acres in California and Washington, D. C. The last well brought in by the Smith Brothers came in for 5,000 barrels.

I still own 600 acres of royalty in Marion County, Mississippi, participating in the rentals under the Sun and Texas Companies. This pays about 10% in advance from the rentals and is under a ten year lease. Will sell for $3.00 an acre. This, of course, is wildcat, but virtually every major company has bought immense acreage in Mississippi in the last six months and is making tests in Marion County and adjoining counties.

Can supply non-productive royalties and leases in nearly any county in Texas from $3.00 an acre up. Will buy royalties and leases in Oklahoma and Texas.

All of my offerings are subject to prior sale, change of price, and withdrawal.

P. R. KNICKERBOCKER
3237 Westminster
Dallas, Texas.

ATTENTION—DEALERS
We are offerig Warranty Deed lots all royalty, under lease, in new BRITTON oil field—exempt from security registration. G. E. Fisher, 518 Key Bldg., Oklahoma City, Okla.

OIL Royalties and leases ahead of development. $10 per acre and up. G. E. Fisher, Key Bldg., Oklahoma City, Okla.

ELIMINATE guess and loss. Can positively locate oil or gas. Tell how many productive sands and approximate depth. Method proven by many wells. Can prove all I claim. Charges reasonable. Might carry interest for work. References exchanged. Address Box G-751, The Oil and Gas Journal, Tulsa, Okla.

Royalties—Production

ANDREW J. BARRETT
The Philtower
Tulsa, Oklahoma.

Van—East Texas—Louisiana Royalties
Bought—Sold.
WILLIAM MONROE LAYTON
67 Wall St., Suite 1510, New York City.

GULF COAST ROYALTIES
Bought and Sold.
Producing and non-producing royalties in salt dome fields of Texas and La.
ZENI OIL COMPANY
412 Esperson Bldg., Preston 4420.
Houston, Texas.

J. A. WOLF AND COMPANY
105 West Adams Street
Chicago, Illinois
Dealers in Oil Royalties since 1918.

Income Producing Royalties
Mid-Continent Field
Harry A. George
427 Perrine Bldg., Oklahoma City, Okla.

PRODUCING OIL ROYALTIES
for dealers.
H. P. BOWEN
842 Kennedy Bldg., Tulsa, Okla.

PRODUCING OIL ROYALTIES
(ALL FIELDS)
Bought, Sold and Quoted.
HENRY L. BAKER CO.,
207 Van Nuys Bldg.,
Los Angeles, Calif.
Telephone Trinity 7391

WRITE W. P. Harley, Bowling Green, Ky., for drilling propositions in proven shallow territory—Turn-Key job.

DEALERS IN ODD LOTS
EAST TEXAS AND VAN POOL
PRODUCING OIL ROYALTIES
We Buy and Sell.
E. T. MARION REAL ESTATE CO.
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CALIFORNIA
OIL ROYALTIES
Long Beach Field, Los Angeles County, California.
NEW YORK FINANCIAL &
COMMUNITY CORP.
144 East 86th St.
New York, N. Y.

CALIFORNIA OIL ROYALTIES
Dealers Only
Signal Hill—Huntington Beach
Kettleman Hills
RICHARDS & COMPANY
650 So. Spring St., Los Angeles, Calif.

Royalties—Production

BETTER CLASS
MONTHLY PAYING ROYALTIES
Quoted Dealers Exclusively.
W. E. COOK
Suite 812, Palace Bldg., Tulsa, Okla.

Producing Oil Royalties
at wholesale.
ROBERT L. KINKAID, INC.
Petroleum Bldg., Oklahoma City, Okla.

PRODUCING OIL ROYALTY paying monthly income in half acres and upwards at reasonable prices. Federal listed. S. J. Jewell, P. O. Box 35, Tulsa, Okla.

NEW MEXICO, choice landowners' perpetual royalties in Lea County close to activity under major company leases. Just off the press, Lea County ownership map in 3 parts, $1.00 each. Roy G. Barton, Clovis, N. Mex.

OIL REPORT SERVICE
Specimen and Particulars on Request.
OIL INFORMATION BUREAU
501-04 Petroleum Bldg., Okla. City, Okla.

Prod. and nonprod. royalties, Kans., Okla., Tex., Lea Co., N. Mex., bargain prices. Jas. R. Haynes, Grantville, Kans.

BROKERS — SALESMEN
Sell in the most active area in the United States—The Permian Basin of West Texas and Southeastern New Mexico. From the standpoint of royalty investors this area has much to offer. Can supply you with choice non-producing royalties located on geophysical highs. Also drilling blocks, close in acreage to production, or wildcat leases. I maintain my own field men who cover this area for me. All offerings meet the requirements of the Securities and Exchange Commission. Inquiries invited.
B. D. BUCKLEY
Paul Brown Bldg., St. Louis, Mo.

WILL PURCHASE BOSCO—VAN
Submit detailed offerings.
W. E. HOUSEL
56 Pine Street, New York City.

Leases—Production

PERSONS are representing themselves as agents for the William E. Hughes Estate, Denver, Colorado, and are attempting to interest oil companies and others in lands owned by the Estate in Hall, Motley, Cottle, Wheeler and Collingsworth Counties, Texas.

Notice is hereby given that the Hughes Estate has no authorized agents in the field and deals directly from the Denver Office only. The Wm. E. Hughes Estate, Denver, Colorado.

Leases—Production

LEASES in proven big gas territory, not condemned for oil, at ten to twenty-five, royalties at twenty to fifty; wildcat ahead of production and between two producing territories at three to ten for lease and six to twenty for royalty in Texas Panhandle or Western Oklahoma should be good investments. Can furnish leases forty acres up, royalty ten acres up. E. B. Reeves, Box 475, McLean, Tex.

GO 50-50 WITH "BUD"
With four chances to win gas or oil in stripper fields. Four producing strata above 800 feet; gas to five million or more and eight cent market. Pipe line and truck oil markets. I furnish leases, drill, give you half. Write for full data, clean-cut, definite.
H. B. Buddenborg, Osawatomie, Kans.

NEW MEXICO—My weekly scout report furnishes complete and reliable information on New Mexico developments. Send for copy. W. S. Patterson, Santa Fe, N. Mex.

NEW MEXICO Oil and Gas Leases and royalties. Send 50 cents in stamps for new State Oil Map of New Mexico. Roy G. Barton, Clovis, New Mexico.

Business Opportunities

For Sale $17,500 Coal Roy. for $3,000 cash. Mine in operation now. Sick and must sell. Jasper N. Butler, Poteau, Okla.

WILL DRILL proven acreage for fair equity. Desire early start so state full particulars first letter, depth, volume, market, etc. H. A. STEBINGER, Nacogdoches, Texas.

Geophysical Services

GEOPHYSICAL TESTS made of any Well Location in Tex. or Okla.: Crew Service $45; Via Express $20 by following our directions. Geological Scientific Service Co., 957 Davis, Ft. Worth, Tex.

Maps

MICHIGAN OIL FIELDS
MAPS AND REPORTS.
PERCY L. PROUT
Geologist,
1231 Majestic Bldg., Detroit, Mich.

UP TO DATE MAPS
All parts of Texas and Lea Co., N. M. New PERMIAN BASIN DEVELOPMENT MAP. Prompt attention to mail orders. ZINGERY OIL MAP CO., Fort Worth, Texas.

Real Estate

15% NET INVESTMENT
$18,528 rental during next 5½ years from Texas Company lease, pays 15% net on price of $20,000. Play safe against inflation and enjoy a splendid income. Property worth $25,000. Wm. F. Schutz, 311 Navarro St., San Antonio, Texas.

Patent Attorneys

REGISTERED PATENT ATTORNEYS
United States and Canada
Before disclosing your invention to any one, send for blank form:
"Evidence of Conception,"
Instructions "How to Establish Your Rights" and complete information FREE!
LANCASTER, ALLWINE & ROMMEL
418 Bowen Building,
Washington, D. C.

Incorporations

CHARTERS — Delaware best, quickest, cheapest, most liberal. Free Forms. Colonial Charter Co., Wilmington, Del.

DELAWARE CHARTERS—Fee small; submitted forms. Chas. G. Guyer, 901 Market Street, Wilmington, Del.

Oil Industry Printing

"Silver Anniversary Catalog Ready Now"
OIL FIELD LEGAL BLANKS
Leases, assignments, releases, township plat books, well records, etc. Request on your letterhead gets free catalog. Olds Press, 215 East Third St., Tulsa, Okla.

CLASSIFIED DISPLAY RATES

Classified Display Advertising is set with a border and may be used in one or two column sizes. Ten point text capitals are allowed; larger type not accepted.

1 Inch	*1 time*	*$5.00*
1 Inch	*13 times*	*4.50 per inch*
1 Inch	*26 times*	*4.00 per inch*
1 Inch	*52 times*	*3.50 per inch*

This space may be contracted for over a period of one year from the date of the first insertion and is PAYABLE IN ADVANCE, MONTHLY.

CLASSIFIED RATES

Classified advertising rates: First insertion, 35 cents a line; each additional insertion, 25 cents a line. PAYABLE IN ADVANCE. Six words usually make a line. Count as a word each one-letter word and each group of figures. White space computed at regular line rate. Allow two extra lines for blind ads. Ads of less than three lines not accepted. No formal acknowledgement is made, and proofs cannot be shown in advance of publication.

	1 time	2 times	3 times	4 times
3 Lines	*$1.05*	*$1.80*	*$2.55*	*$3.30*
4 Lines	*1.40*	*2.40*	*3.40*	*4.40*
5 Lines	*1.75*	*3.00*	*4.25*	*5.50*
6 Lines	*2.10*	*3.60*	*5.10*	*6.60*

	1 time	2 times	3 times	4 times
7 Lines	*$2.45*	*$4.20*	*$5.95*	*$7.70*
8 Lines	*2.80*	*4.80*	*6.80*	*8.80*
9 Lines	*3.15*	*5.40*	*7.65*	*9.90*
10 Lines	*3.50*	*6.00*	*8.50*	*11.00*

We reserve the right to withhold all advertising of questionable character. To avoid delay be sure to send remittance with copy. We will set your ad in the smallest amount of space possible and refund all overpayments. One-time insertions will not be run until fully paid. Forms close MONDAY NOON before each issue date.

THE OIL AND GAS JOURNAL
Tulsa, Oklahoma

CLASSIFIED ADVERTISING

For Sale—Equipment

Dismantling Continental Oil Refinery, Sapulpa, Oklahoma

We offer for sale the entire plant and equipment at salvage prices. Seldom has such late type Topping and Cracking equipment been dismantled. A personal inspection will convince you. Some of the principal items as follows:

2—525 H.P. Babcock & Wilcox Water Tube Boilers, with Superheaters complete with extra equipment for efficient and economic operation. Guarantee insurance inspection. Rating 160 lbs. pressure.

2—National Transit Duplex Steam Hot Oil Pumps—Cap. 185 GPM—1000 lbs. pressure—900° F. Driven by Cross Compound Steam Engine, Condensing type. Pumps like new, original cost about $26,000 each. Will sacrifice at small fraction of new cost for quick sale.

1—Foster Wheeler Tube Still, Cap. 4000 bbls. (24 hrs.) looks like new.

14—Brown Electric Control & Recording Instruments, complete in every detail—Modern type—Equal in every respect to any instrument offered by new manufacturer—A chance to make a big saving.

22—Braun Heat Exchangers from 98 to 1000 sq. ft. surface. Floating head type—1, 2 and 4 Pass. Enough sizes to suit your requirements.

1—Complete Gas Absorption Plant—Cap. 100 bbls. day—Designed to operate up to 60 lbs. pressure—Includes full equipment.

1—Complete Continuous Treater and Doctor plant.

Many other items too numerous to mention such as FRACTIONATING BUBBLE TOWERS, CENTRIFUGAL WATER PUMPS powered by electric motors, AGITATORS, STEAM PUMPS, FIRE PUMPS, FIRE FIGHTING APPARATUS, CONDENSER AND COOLING BOXES, STEEL STORAGE TANKS, CRANE AND WALWORTH STEEL VALVES and FITTINGS, 100 miles of PIPE LINE from ¾" to 12", etc., etc.

WRITE FOR FULL DESCRIPTIVE CIRCULAR

BROWN-STRAUSS CORPORATION

Mail address, P. O. Box 220, Sapulpa, Oklahoma Phone 1476

Home Office and Plant—Kansas City, Missouri.

USED PIPE PROTECTORS

Car load consisting 8, 10, 12, 16". Available for immediate shipment. Used Structural Steel and Tanks, all sizes in good condition.

A. MARX & SONS, INC.
Box 889 New Orleans, La.

4—300 amp. Lincoln Engine driven welder. A-1 condition. Stationary type. Service Co., 3732 Cedar, Cleveland, Ohio.

25 K.W. and 40 K.W. Gas Engines, 220 volts, D.C. Two 100 K.W. Gas Engine Generator Sets, 220 volts, D.C. 7x6 Ingersoll-Rand ER-1 Air Compressor. Six-inch Oster Pipe Threading Machine. Also large stock of lathes, pipe machines, milling machines, etc. Send for our list. Terms to suit.

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PROSPECTUSES prepared and deals shaped up for registration or exemption under Federal Security Act. Fee basis. John Morris, Seventh Floor, 1237 Market St., Philadelphia, Pa.

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Wire, phone, or write,
W. C. Berry or H. J. Galamba

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GRADUATE ENGINEER
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SALES ENGR., 10 years' sales and engineering industrial petroleum. Ch. Engr. marine license Diesel vessels. Power plants, Paper mills, railroads, training men, market surveys. Age 43. Address Box G-740, The Oil and Gas Journal, Tulsa, Oklahoma.

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Every week, The Oil and Gas Journal classified section reaches a cash market, where the demand is greater than the supply.

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THE OIL and GAS JOURNAL

Oil Man's Calendar

July

15-16—Los Angeles, Calif., Mineral Law Section, American Bar Association, Biltmore Hotel.

18—South Dakota Independent Oil Men's Association, place to be named later.

August

1—Los Angeles, Calif., California Natural Gasoline Association.

(?)—American Petroleum Equipment Suppliers' Association, place to be named later.

19-24—San Francisco, Calif., American Chemical Society.

September

4-5—Louisville, Ky., Kentucky Petroleum Marketers Association.

18-20—Hot Springs, Ark., North American Gasoline Tax Conference.

18-20—Atlantic City, N. J., National Petroleum Association, annual meeting, Hotel Traymore.

24-25—Toledo, Ohio, Ohio Petroleum Marketers Association, Annual Fall Conference and Golf tournament.

October

10-12—Houston, Tex., mid-year meeting of Petroleum Division of A.I.M.E.

14-18—Louisville, Ky., National Safety Council, twenty-fourth annual safety congress.

14-18—Atlantic City, N. J., American Gas Association, Manufacturers' Division.

14-19—Oklahoma City, Okla., National Tax Association, Oklahoma Biltmore Hotel.

16-17—Mexico City, Mexico, mid-year meeting A.A.P.G. and seventh annual meeting, San Antonio section, A.A.P.G.

20-26—Paris, France, International Congress of Mining, Metallurgy and Applied Geology.

24-25—Toledo, Ohio, Ohio Petroleum Marketers Association, Annual Fall Conference and Golf Tournament.

November

4-5—Dallas, Tex., I.P.A.A., annual convention.

11-14—Los Angeles, Calif., American Petroleum Institute, sixteenth annual meeting, Biltmore Hotel.

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